



Database Master User Manual

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1 Welcome to Database Master

Database Master is **one of the most** powerful and innovative database client software with a consistent, elegant, intuitive, and easy-to-use interface that simplifies designing, constructing, managing , editing, visualizing, querying and reporting relational (RDBMS) and schema-free (NoSQL) database management systems.

Database Master provides database administrators, database developers, and other IT professionals with an easy access to all the databases in their organizations and is uniquely beneficial when you need to interact with multiple databases created at different times by different developers or applications.

Database Master is a modern Microsoft Windows and .Net-based desktop application that provides a development and management platform for **Oracle, MongoDB, IBM DB2, IBM Informix, IBM Netezza, NuoDB, Ingres, MS SQL Server, MySQL, PostgreSQL, FireBird, EffiProz, dBase, FoxPro** and **SQLite** database systems, and supports **XML** files. It also allows you to connect any database system via **ODBC** and **OleDb** connection technologies.

Using **Database Master** you can create, edit and drop all database objects such as **tables, views, procedures, collections, indexes** and **triggers**. You can execute queries and LINQ, SQL and JSON scripts, view and edit data including BLOBs, represent tables and its relations as an ER diagram, export and import data to/from most popular file formats.

Database Master also provides rich MongoDB features for you: Collection, Index, User and GridFS Manager, Map Reduce Editor, and Query Search Editor for the data search. It provides rich document views: Tree View, Table View and Advanced Table View.

Database Master provides powerful features for:

- Software/Database Developers/Engineers/Architects
 - Develop database and database objects, show relations and more...
- IT Professionals
 - Connect to multiple databases and more...
- Database Administrators
 - Manage users and database objects and more...
- Database Users
 - Query Database without any SQL knowledge and more...

1.1 Supported Database Systems & Connections

- MongoDB 1.4.1 or higher
- Oracle 11g, 10g, 9i, 8i and 8.0

- NuoDB
- IBM DB2
- IBM Informix
- IBM Netezza
- Ingres Database
- MS SQL Server 2005,2008 and 2012 (not 2000)
- MS SQL Azure
- MySQL 5 or higher
- PostgreSQL 8.1 or higher
- FireBird Database 1.5 or higher
- SQLite and EffiProz Database
- dBase, FoxPro and XML Files (XMLDB)
- ODBC and OleDb Connections

1.2 System Requirements

- Windows XP/Vista/Windows 7 (32/64 Bit)
- Windows Server 2003/2008
- Min. 512 MB RAM
- .Net Framework 4.0

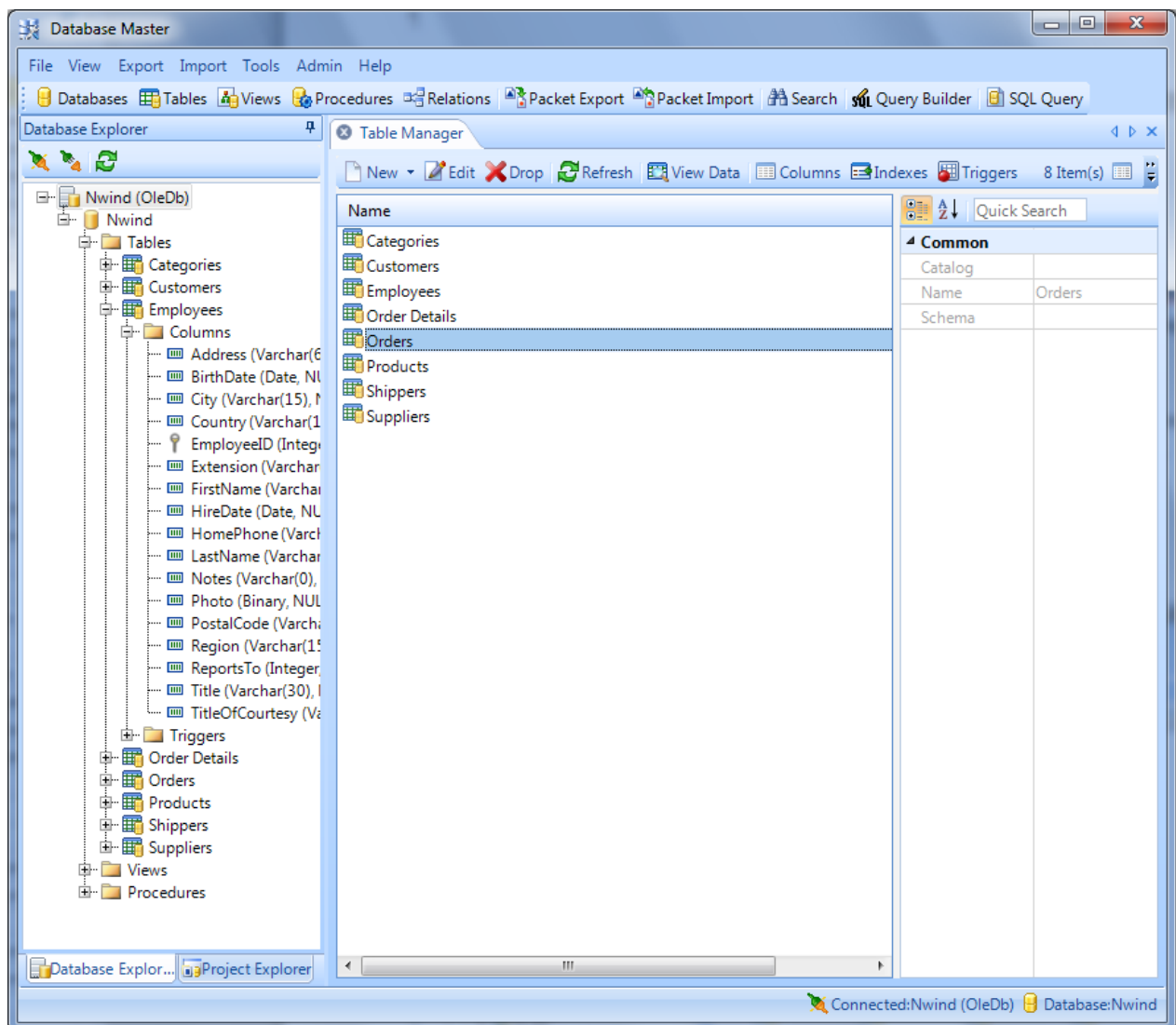
1.3 Server Requirements

- IBM Data Client (If Required)
- IBM Informix Client (If Required)
- IBM Netezza ODBC Driver (If Required)
- NuoDB ODBC Driver (If Required)

2 Getting Started

To start working with databases in Database Master, you should first create a Project file which includes database connections.

After creation a project file, you can connect to the database host. When you connect to the database host, Database Master will populate the databases and tables and will show you the Table Manager tab. To change the connected database; **double-click a database then this database will become the current connected database.**



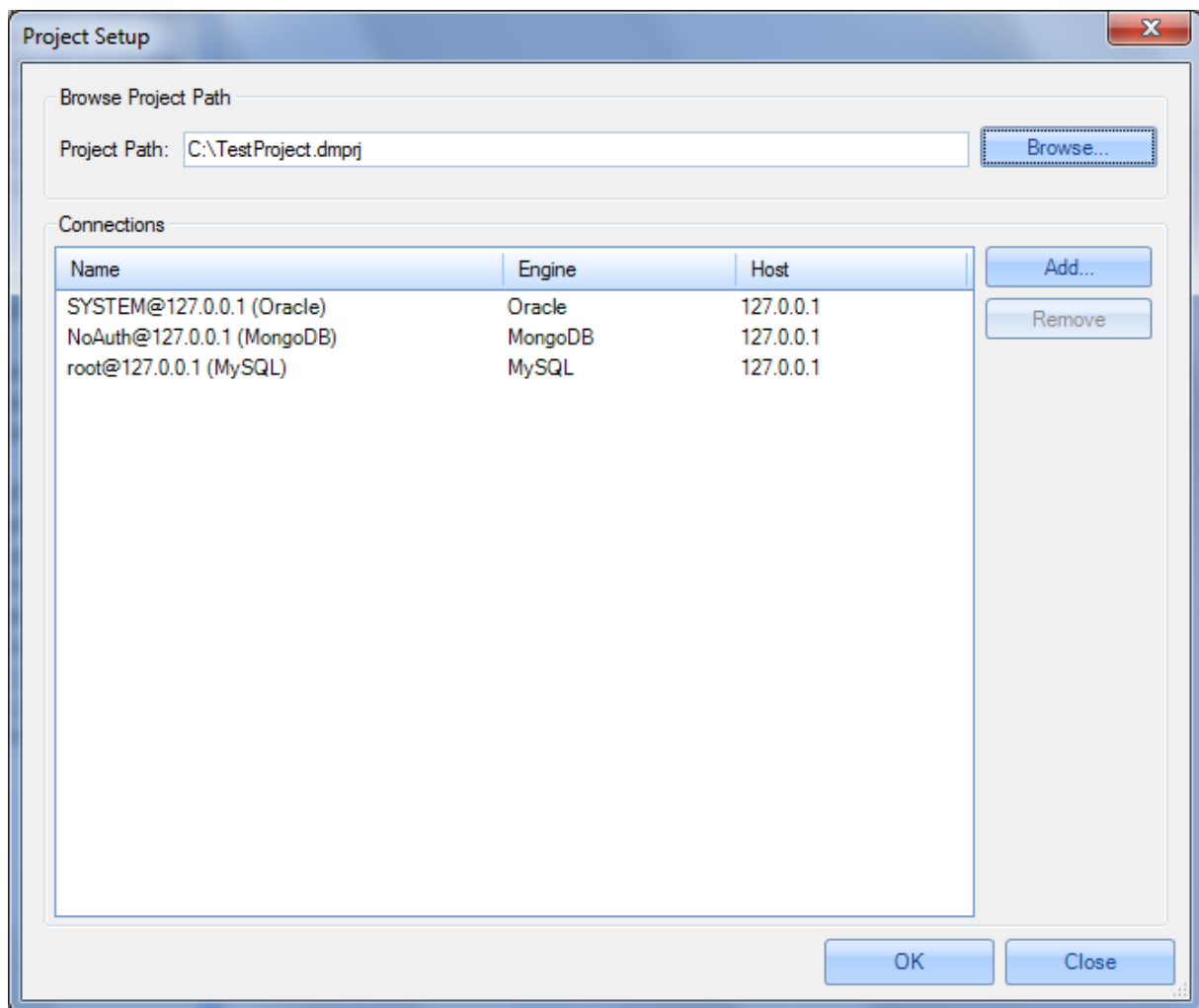
Database Master Main View

The toolbar includes all important features and is divided into different sections, and changing the host connection will modify the toolbar.

3 Project Management

Database Master manages multiple database connections and SQL files in a project file. The project file extension is “**dmproj**” and has a custom icon.

The project file is an encrypted and **human un-readable** file, which includes all database connections. The user has the option to save the database connection password into its project file.



Project Setup Dialog

3.1 Creating a New Project

To create a Project file, either uses the **Project Selector** dialog or the **Project Explorer** window.

The Project Selector dialog will be only shown on Application start up. The Project Selector toolbar contains **New Project**, **Edit Project** and **Open Project** buttons. Using these buttons, you can create a new project, edit or open an existing project.

The user must enter a project name and browse a project file; otherwise the “OK” button will not be enabled.

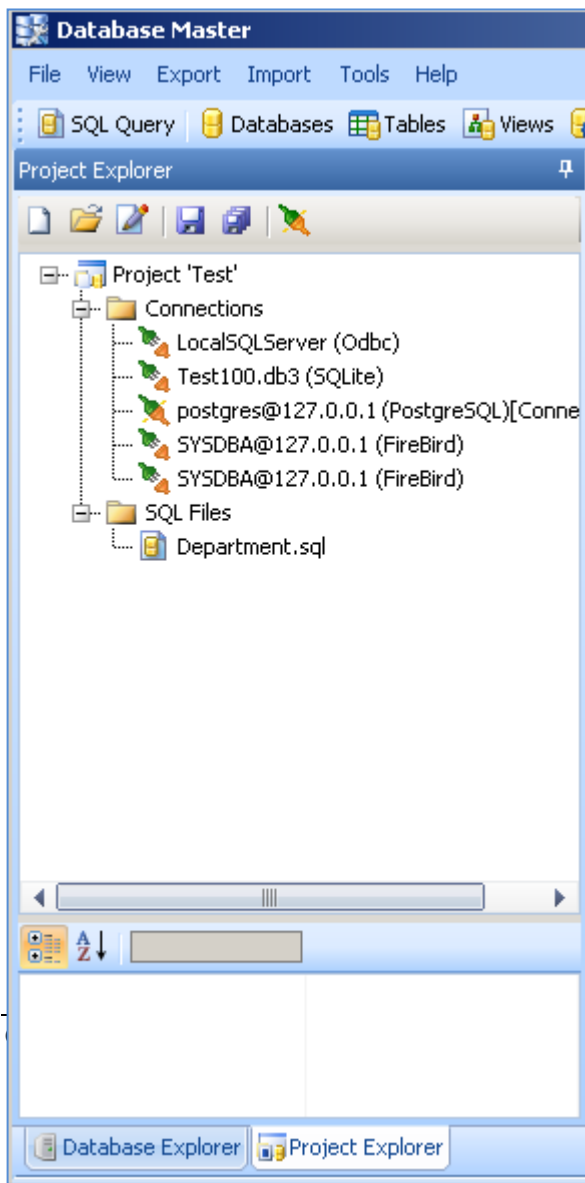
3.1.1 Adding a New Database Connection

To create a new database connection, click the “**Add**” button. A connection dialog will be shown and a database engine (system) can be selected from the combo-box.

After selecting a database engine, you will get the connection specific options. After filling the fields and testing the connection, click the “**OK**” button to save the connection. The dialog will be closed automatically.

The following steps explain how to add a connection:

- Click the “Add” button and Connection dialog will appear.
- Select a host engine
- Fill the connection fields
- Click “OK” button



3.1.2 Deleting an Existing Connection

To delete a database (server) connection first select a connection in the connections list and press the “**Remove**” button in the **Project Setup** dialog.

3.2 Project Explorer

The Project Explorer shows the database connections and SQL files. The Project Explorer allows you to create a new project, open or edit an existing one or connect to a database system. The following picture shows the project explorer:

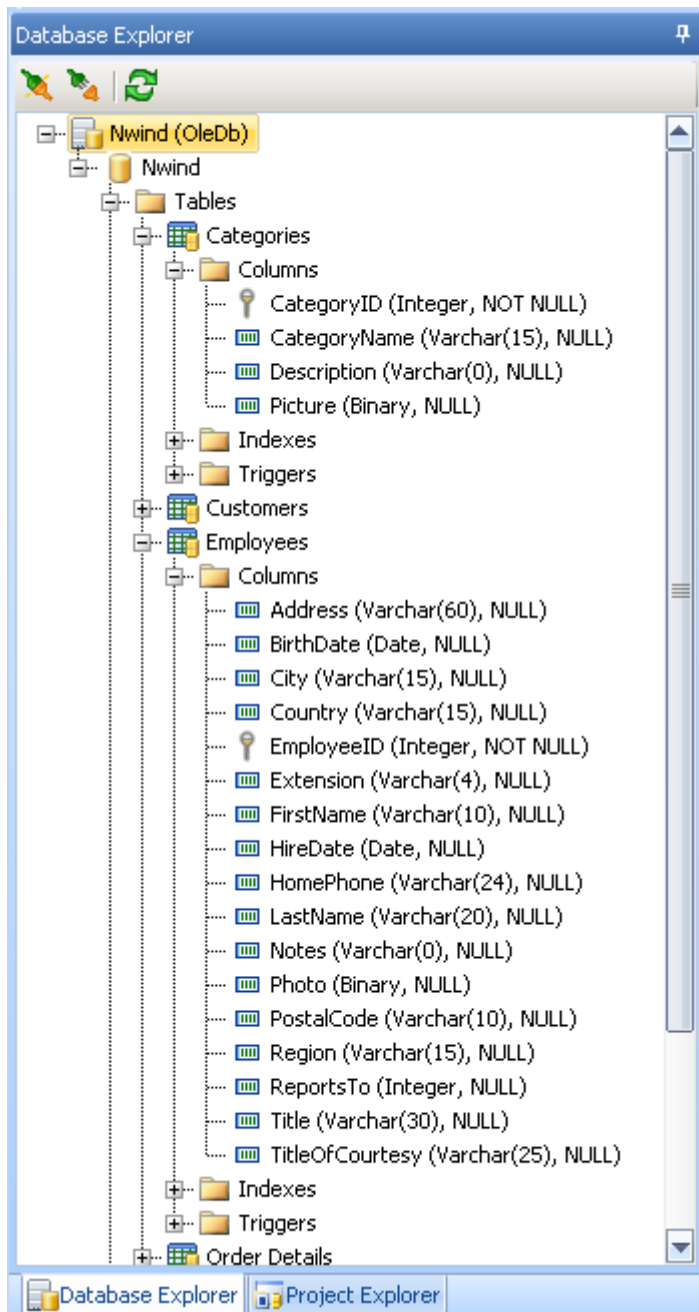
The Project Explorer window includes database connections and SQL files. The bottom part of the window shows the properties of the selected item.

4 Database Explorer

Database Explorer is the main part of **Database Master** which allows you to perform practically all necessary operations upon databases and database objects. The Database

Explorer occupies the left hand side of Database Master's main window.

All of the objects in the explorer tree are listed under the related server's database node.



5 Tables and Table Manager

Table Manager provides a useful, important and rich feature set to manage the table objects. The following figure shows the currently supported Table Manager features.

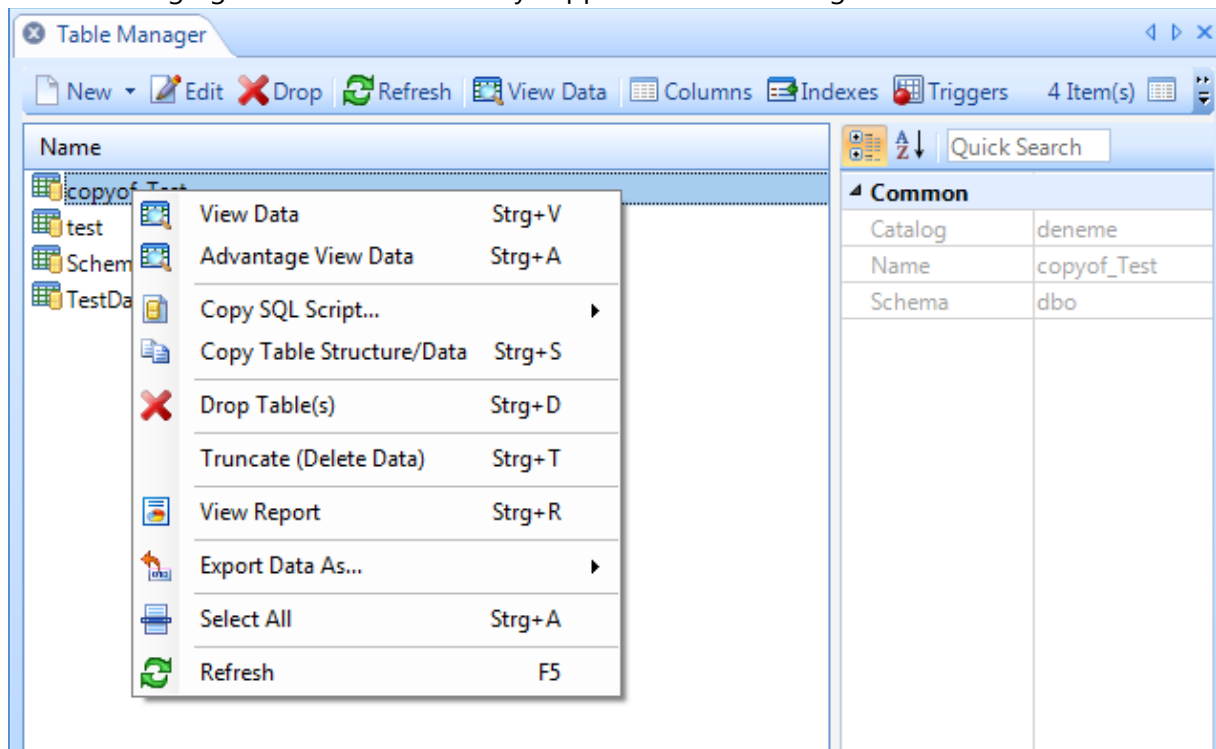


Table Manager

The following list describes the features of the Table Manager:

- New: Allows you to create new table object using Table Editor or SQL Editor.
- Edit: Allows you to edit an existing table structure.
- Drop: Deletes the existing table object from database.
- Refresh: Refreshes the table list.
- View Data: Views the table data.
- Advantage Data View: Views the table data with data visualizers on the right hand side.
- Columns: Shows the Column Manager dialog.
- Indexes: Shows the Index Manager dialog.
- Triggers: Shows the Trigger Manager dialog.
- Copy SQL Script: Copies the selected table as a SQL command.
- Truncate Table: Deletes the selected table data.
- View Report: Views the table report if applicable.
- Export As: Exports the selected table to the different file formats.
- Copy Table Structure/Data: Using this feature you can copy a table structure or its data or both. You can also specify a where clause like: ***id=12 and Name='Bob'***

5.1.1 Table Structure Editor

Table editor allows the user to create a new table or edit (alter) an existing table structure.

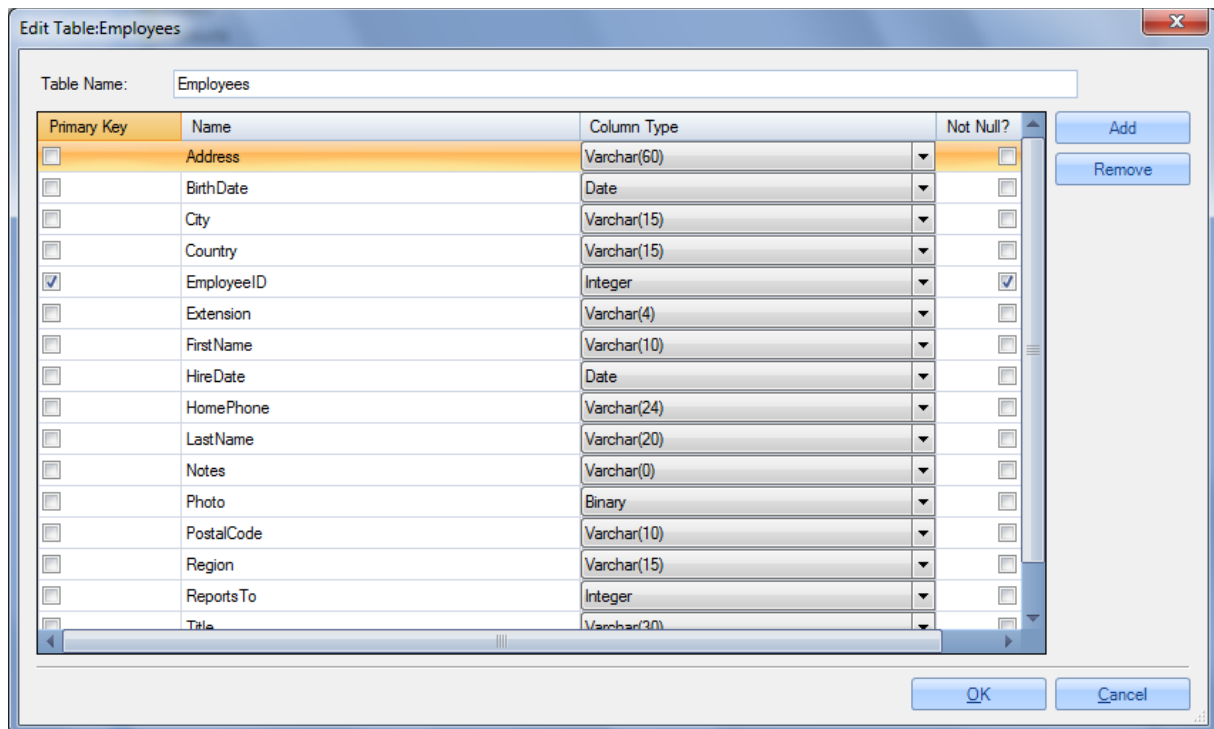
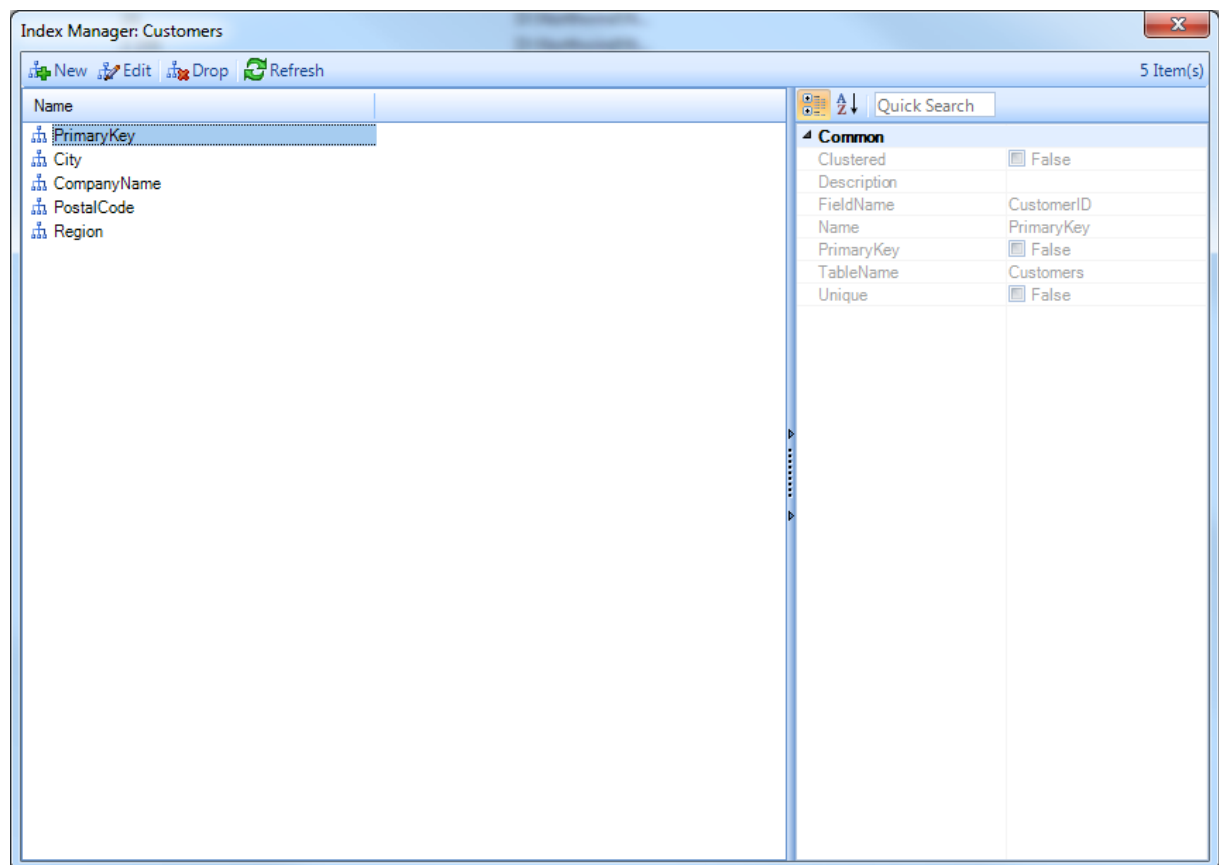


Table Editor Dialog

5.2 Index Manager

Database indexes are primarily used to enhance database performance. The key field(s) for the index is specified as a column name(s). Multiple fields can be specified if the index method supports multi-column indexes.



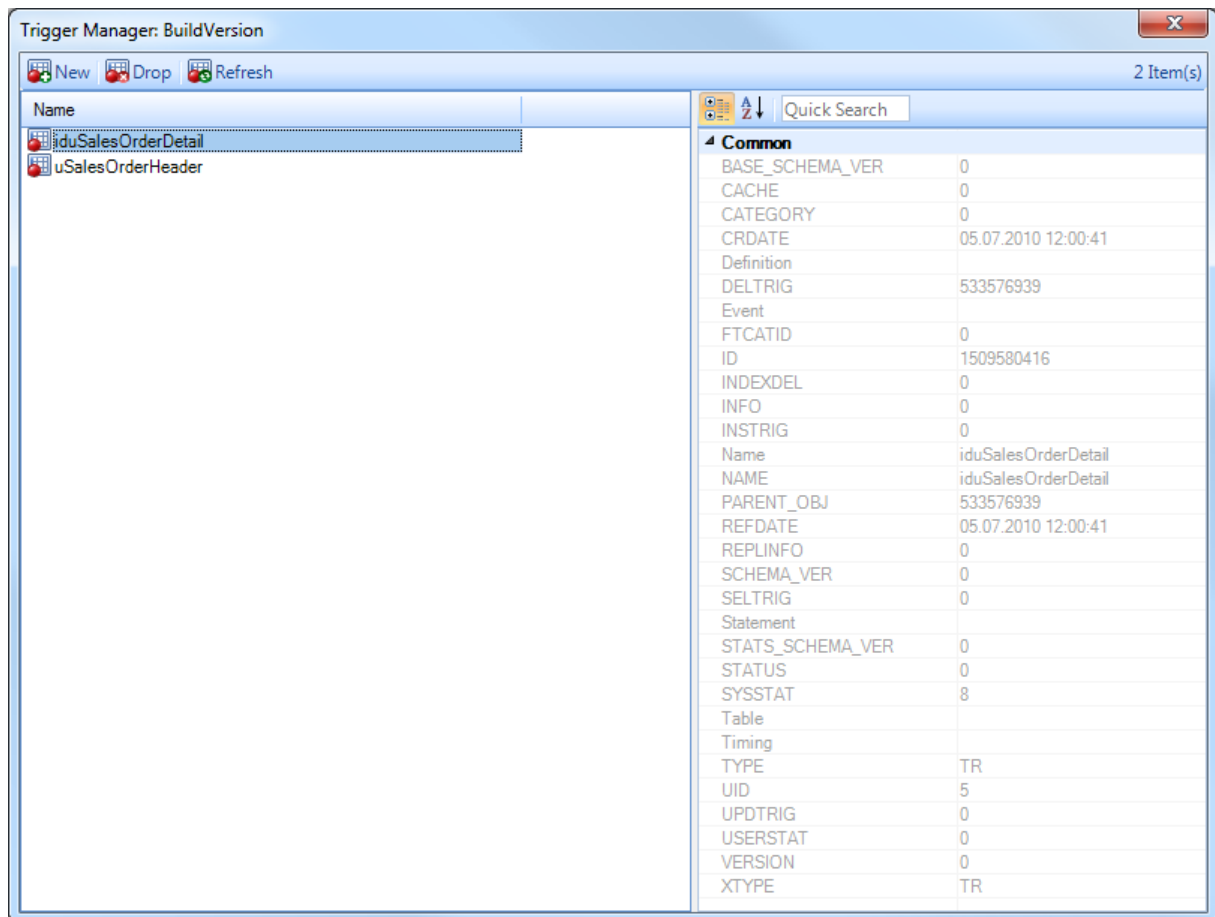
Index Manager

Using Index Manager you can create a new index, edit or drop the existing one. On the right side of the dialog the index properties are visible. The primary key index will be shown with a key icon.

5.3 Trigger Manager

A trigger is a specification that the database should automatically execute a particular feature whenever a certain type of operation is performed. A trigger can be defined to execute before or after an INSERT, UPDATE, or DELETE operation, either once per modified row, or once per SQL statement. If a trigger event occurs, the database engine executes the trigger.

Trigger Manager allows you to manage table triggers. You can create or delete the triggers or see their properties.

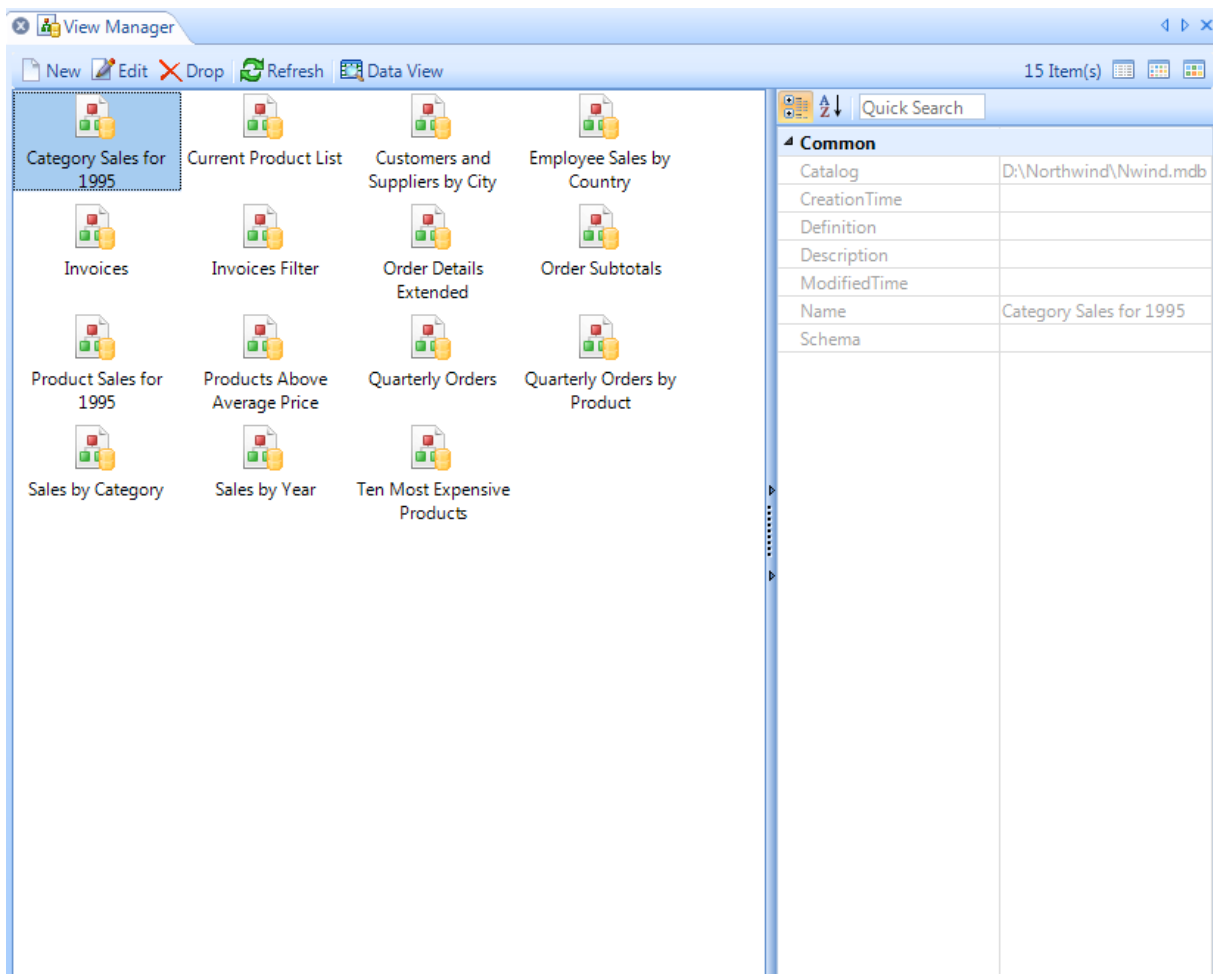


Trigger Manager

6 Views and View Manager

Views are useful for allowing users to access a set of relations (tables) as if they were a single table, and limiting their access to just that. Views can also be used to restrict access to rows.

Database Master provides View Manager Window to manage database views. Using View Manager you can add new views and delete the existing ones, view their data or show the view properties.

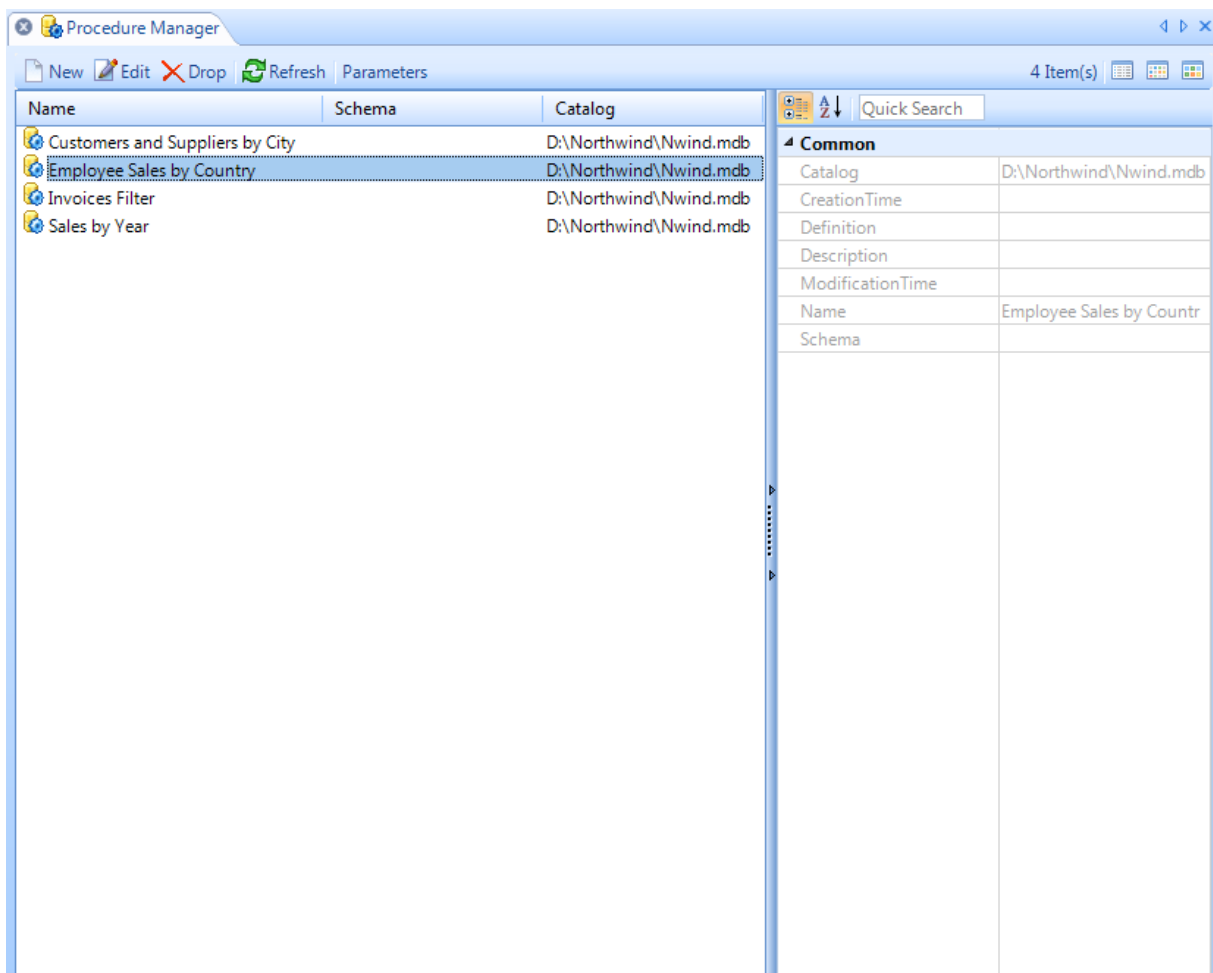


View Manager

7 Stored Procedures and Procedure Manager

Stored procedures (and features) are supported in most used relational database systems. A stored procedure is a set of SQL statements (scripts) that can be stored in the database server. Once this has been done, clients don't need to keep reissuing the individual statements but can refer to the stored procedures stored in the database instead.

Database Master provides Procedure Manager Window to manage database procedures. Using Procedure Manager you can add new procedures (or features) and delete existing ones, execute the procedures or show the procedure properties.

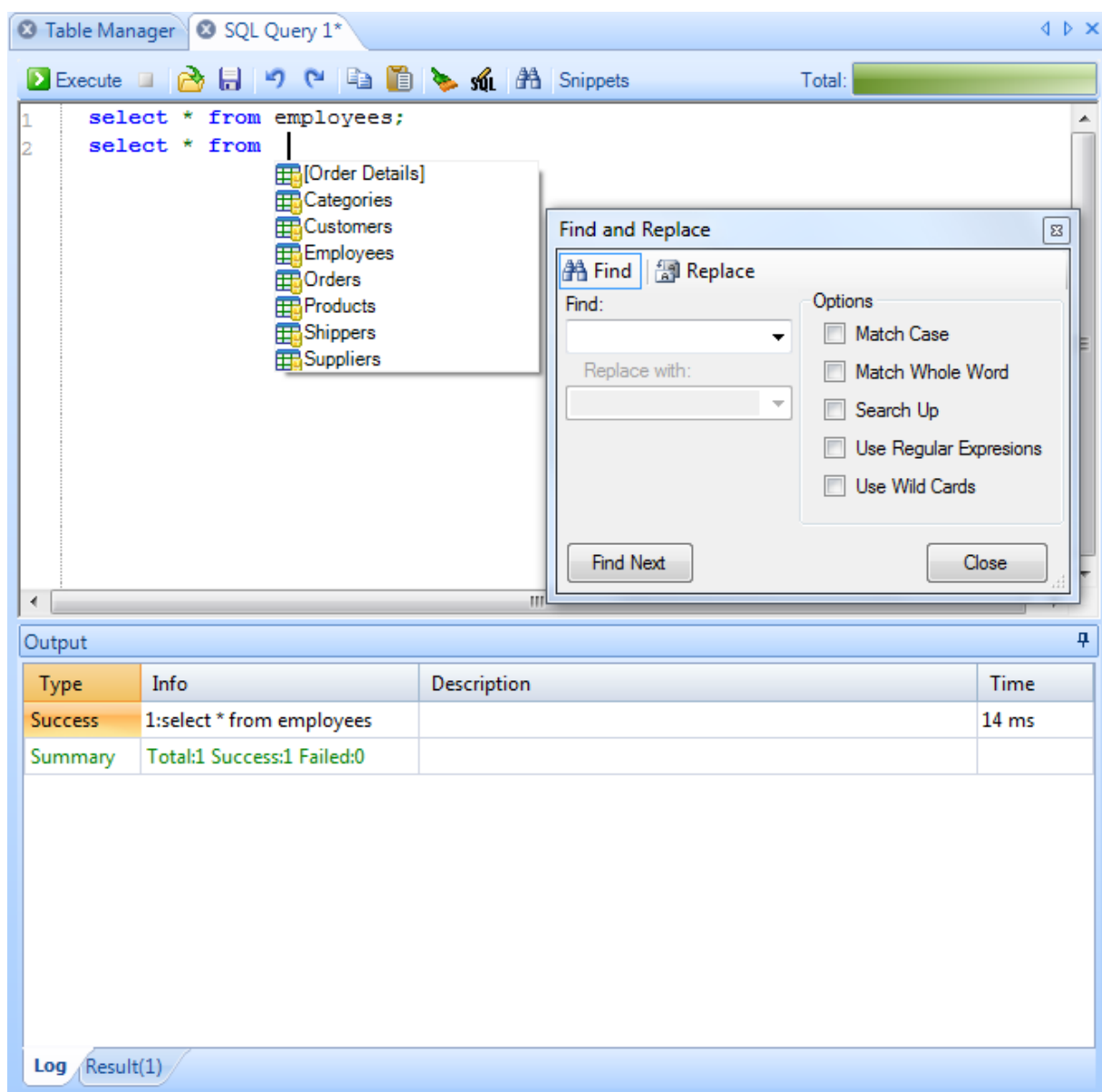


Stored Procedure Manager

8 SQL Query Editor

Database Master Query editor is a powerful SQL editor and provides SQL code highlighting, IntelliSense (Code Completion), code regions, snippets and find features. It also displays the current executed query status with a progress bar and gives information about the total executed query status on the toolbar.

Database Master provides powerful tools which allow you to edit query text directly with syntax highlighting and code completion.



SQL Query Editor

8.1 Executing a script

Pressing **F5**, **CTRL+E** or using the tool menu would execute any highlighted text in the query window. If no text is highlighted, all the text will be sent for execution.

8.2 Output Window

Many database servers such as Microsoft SQL Server are able to handle batch statements. This means they are able to execute many SQL statements at once, returning many data tables* (in case of select statements). If you are executing a script containing five select statements, the result would be five data tables presented in the output window.

Some other database servers, such as Oracle and MySQL, require each statement to end with a semicolon ";" and do not support batch statements. If you would type five statements (ended with ";") in one script and execute it, Database Master would split the script into five statements and execute each one separate from the others.

Using the "GO" word in MS SQL Server would give the same result.

When you execute a script that returns a result, the result of the script will be presented in the output window. The output window contains a Log output tab and tabs for each select query result. If there is more than one SQL select query all the results will be displayed here.

The Log window contains the following information about the SQL query:

- **Type:** Result type.
- **Description:** SQL command and database engine message.
- **Time:** Execution time of the SQL command in milliseconds.

8.3 IntelliSense

By pressing **any key** IntelliSense will provide an array of options that make language references easily accessible. When coding, you do not need to leave the editor window to perform searches on database elements.

You can keep your context, find the information you need, insert elements directly, and even have IntelliSense complete your typing. IntelliSense comprises database objects, reserved words, local variables, columns and even joining options.

8.4 Code Scripts

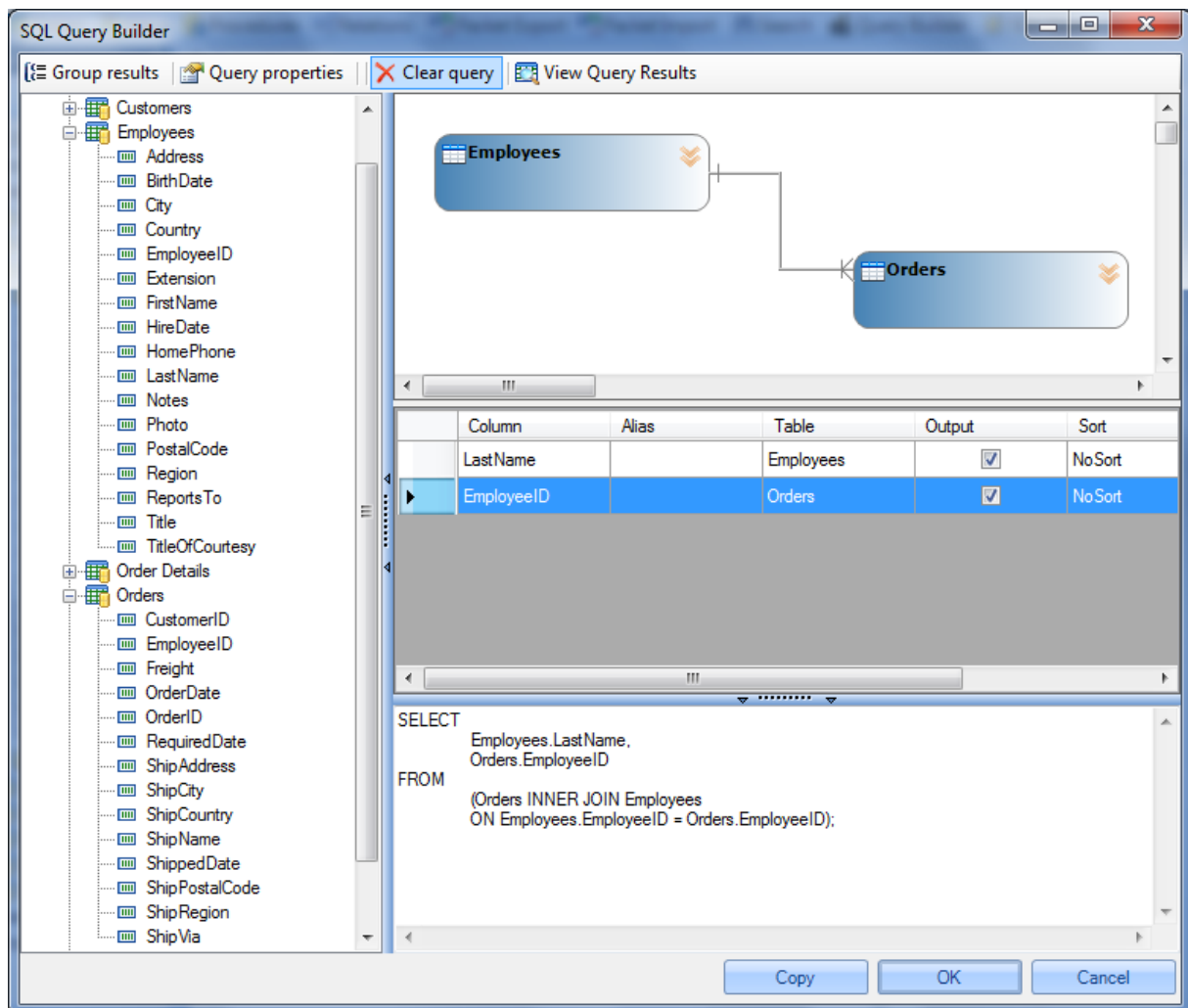
Database Master's IntelliSense snippets enable developers to easily manage and distribute their own customized SQL code libraries. Inserting these commonly used pieces of code is an effective way to enhance your productivity. You can save time because you no longer need to

search countless sources of code examples just to find a similar piece of code to copy and paste into your solution code.

To add a snippet, simply highlight its text, right-click and select Snippets->Add to snippets. To delete a snippet, use the Snippet Manager on the toolbar.

9 SQL Query Builder

The SQL query builder helps you quickly build SQL select statements. On the left side the current connected database tables are listed. On the right hand side the ER-Diagram, columns and SQL script box show up.



SQL Query Builder

10 JSON Query Editor

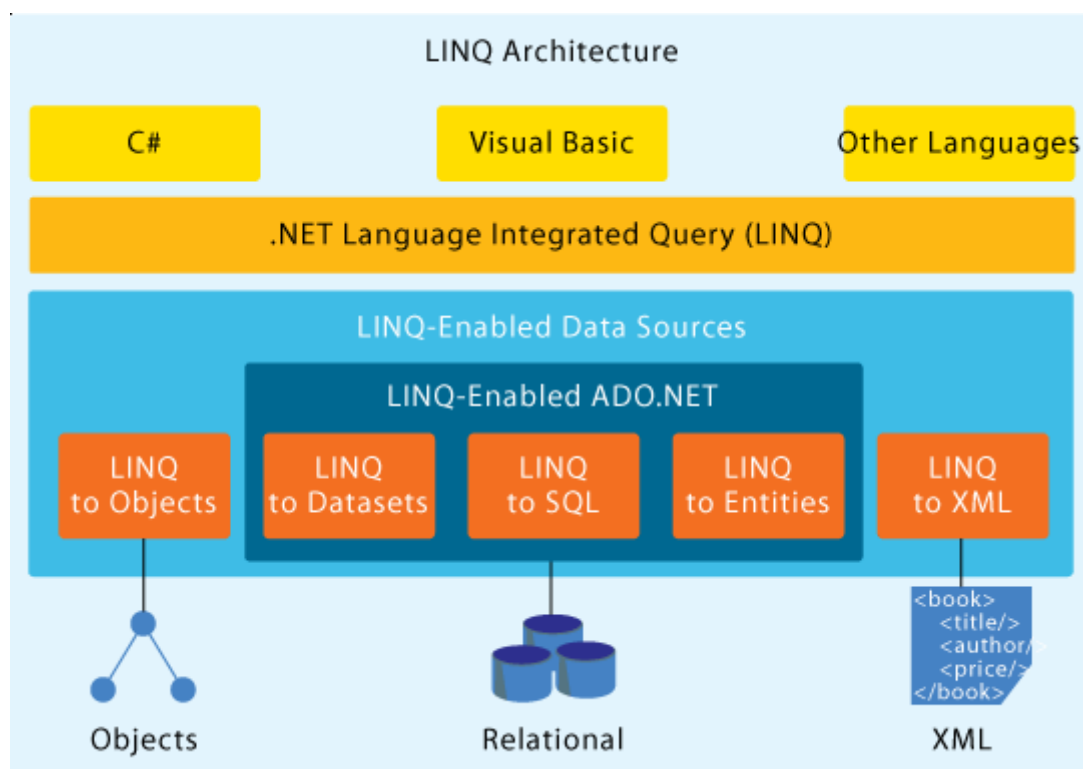
Database Master's JSON Query editor is a powerful and feature rich query editor, provides JSON code highlighting, IntelliSense (code completion), code regions, snippets and text finding features. JSON query editor provides same features like SQL Query editor and it is available only for MongoDB database engine.

Please not that; Database Master does not support all MongoDB Shell command line query features. If you need a special command, please contact with us.

11 LINQ Query Editor

The Language Integrated Query - LINQ is a Microsoft .NET Framework technology that adds native data querying capabilities to .NET languages. LINQ enables developers to form set-based queries in their application code, without having to use a separate query language. You can write LINQ queries against various enumerable data sources, such as in-memory data structures, XML documents, SQL databases, and [DataSet](#) objects. Although these enumerable data sources are implemented in various ways, they all expose the same syntax and language constructs. Because queries can be formed in the programming language itself, you do not have to use another query language (like SQL) that is embedded as string literals that cannot be understood or verified by the compiler.

There are three separate ADO.NET Language-Integrated Query (LINQ) technologies: LINQ to DataSet, LINQ to SQL, and LINQ to Entities. LINQ to DataSet provides richer, optimized querying over the [DataSet](#) and LINQ to SQL enables you to directly query SQL Server database schemas, and LINQ to Entities allows you to query an Entity Data Model. The following diagram provides an overview of how the ADO.NET LINQ technologies relate to high-level programming languages and LINQ-enabled data sources.



LINQ Query editor is an innovative feature and can run dynamically LINQ Query scripts. It supports currently LINQ to Entities (Entity Framework), LINQ to DataSet, LINQ to Objects and LINQ to XML queries. The LINQ query feature is currently supported for MS SQL Server, IBM

DB2, MySQL, PostgreSQL, SQLite, FireBird, EffiProz database engines. Support for Oracle, MongoDB and Informix engines will be implemented soon.

LINQ to SQL technology is not supported.

11.1 Result Output

After executing the query script, you can dump the results using **Output** method. The Dump method detects automatically the given object list and visualize the data as a table or a tree view.

11.2 Linq to Entity Framework

ADO.NET Entity Framework (EF) is an [object-relational mapping](#) (ORM) framework for the [.NET Framework](#). ADO.NET Entity Framework abstracts the [relational \(logical\) schema](#) of the data that is stored in a [database](#) and presents its [conceptual schema](#) to the application. The ADO.NET Entity Framework enables developers to create data access applications by programming against a conceptual application model instead of programming directly against a relational storage schema. The goal is to decrease the amount of code and maintenance required for data-oriented applications.

If you open the LINQ Query Editor, the conceptual schema or Database Object Context (Database Access Layer) will be generated automatically using EDM generator. The user can access the all database Entities and Objects and execute C#/VB.Net code.

Info:

http://en.wikipedia.org/wiki/ADO.NET_Entity_Framework

11.3 Linq to DataSet

Database Master allows you to execute Linq to DataSet code against any database system. LINQ to DataSet makes it easier and faster to query over data cached in a [DataSet](#) object. Specifically, LINQ to DataSet simplifies querying by enabling developers to write queries from the programming language itself, instead of by using a separate query language. This is especially useful for Microsoft Visual Studio developers, who can now take advantage of the compile-time syntax checking, static typing.

LINQ to DataSet can also be used to query over data that has been consolidated from one or more data sources. This enables many scenarios that require flexibility in how data is represented and handled, such as querying locally aggregated data and middle-tier caching in applications.

The LINQ to DataSet functionality is exposed primarily through the extension methods in the [DataRowExtensions](#) and [DataTableExtensions](#) classes.

11.4 Linq to XML

LINQ to XML was developed with Language-Integrated Query over XML in mind from the beginning. It takes advantage of standard query operators and adds query extensions specific to XML. From an XML perspective, LINQ to XML provides the query and transformation power of XQuery and XPath integrated into .NET Framework languages that implement the LINQ pattern. This provides a consistent query experience across LINQ enabled APIs and allows you to combine XML queries and transforms with queries from other data sources.

For more help:

LINQ Basic Info: http://en.wikipedia.org/wiki/Language_Integrated_Query

LINQ to Entities: <http://msdn.microsoft.com/en-us/library/bb399367.aspx>

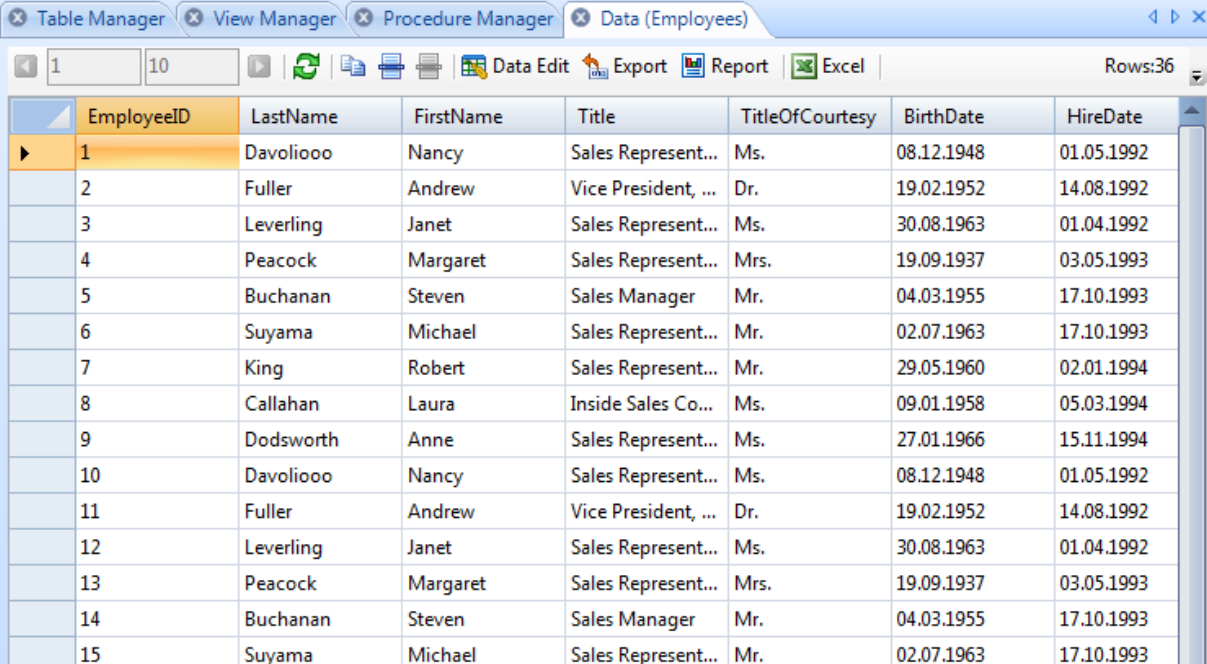
LINQ to XML: <http://msdn.microsoft.com/en-us/library/bb387098.aspx>

LINQ to DataSet: <http://msdn.microsoft.com/en-us/library/bb386977.aspx>

LINQ to Objects: <http://msdn.microsoft.com/en-us/library/bb397919.aspx>

12 Table Data View

The data table view provides rich data export, simple data report, advanced GUI based data editor, data copy and data paging features for the user.



EmployeeID	LastName	FirstName	Title	TitleOfCourtesy	BirthDate	HireDate
1	Davoliooo	Nancy	Sales Represent...	Ms.	08.12.1948	01.05.1992
2	Fuller	Andrew	Vice President, ...	Dr.	19.02.1952	14.08.1992
3	Leverling	Janet	Sales Represent...	Ms.	30.08.1963	01.04.1992
4	Peacock	Margaret	Sales Represent...	Mrs.	19.09.1937	03.05.1993
5	Buchanan	Steven	Sales Manager	Mr.	04.03.1955	17.10.1993
6	Suyama	Michael	Sales Represent...	Mr.	02.07.1963	17.10.1993
7	King	Robert	Sales Represent...	Mr.	29.05.1960	02.01.1994
8	Callahan	Laura	Inside Sales Co...	Ms.	09.01.1958	05.03.1994
9	Dodsworth	Anne	Sales Represent...	Ms.	27.01.1966	15.11.1994
10	Davoliooo	Nancy	Sales Represent...	Ms.	08.12.1948	01.05.1992
11	Fuller	Andrew	Vice President, ...	Dr.	19.02.1952	14.08.1992
12	Leverling	Janet	Sales Represent...	Ms.	30.08.1963	01.04.1992
13	Peacock	Margaret	Sales Represent...	Mrs.	19.09.1937	03.05.1993
14	Buchanan	Steven	Sales Manager	Mr.	04.03.1955	17.10.1993
15	Suyama	Michael	Sales Represent...	Mr.	02.07.1963	17.10.1993

Default Table Data View

12.1 Data Visualizer

The data visualizers allow you to visualize BLOB data types.

12.1.1 Image Visualizer

The Image Visualizer visualizes the BLOB data type as an image. It allows you to save the image object into the following image formats (PNG, GIF, JPEG etc.).

12.1.2 Text Visualizer

The Text Visualizer allows you to visualize the BLOB data type as a text. It allows you to save the text to the hard disk.

12.1.3 Chart Visualizer

The Chart Visualizer allows you to visualize the selected data as a Chart view. You can save your chart as an image file.

13 Data Editor

The Data Editor provides an easy way to edit or create data. You can edit (update) or create new data with this editor without any SQL code. You can also delete the existing data. The data editor visualizes the table data in the dialog.

When you create new data record or edit the existing, you should always click to “Save Changes” button on the toolbar.

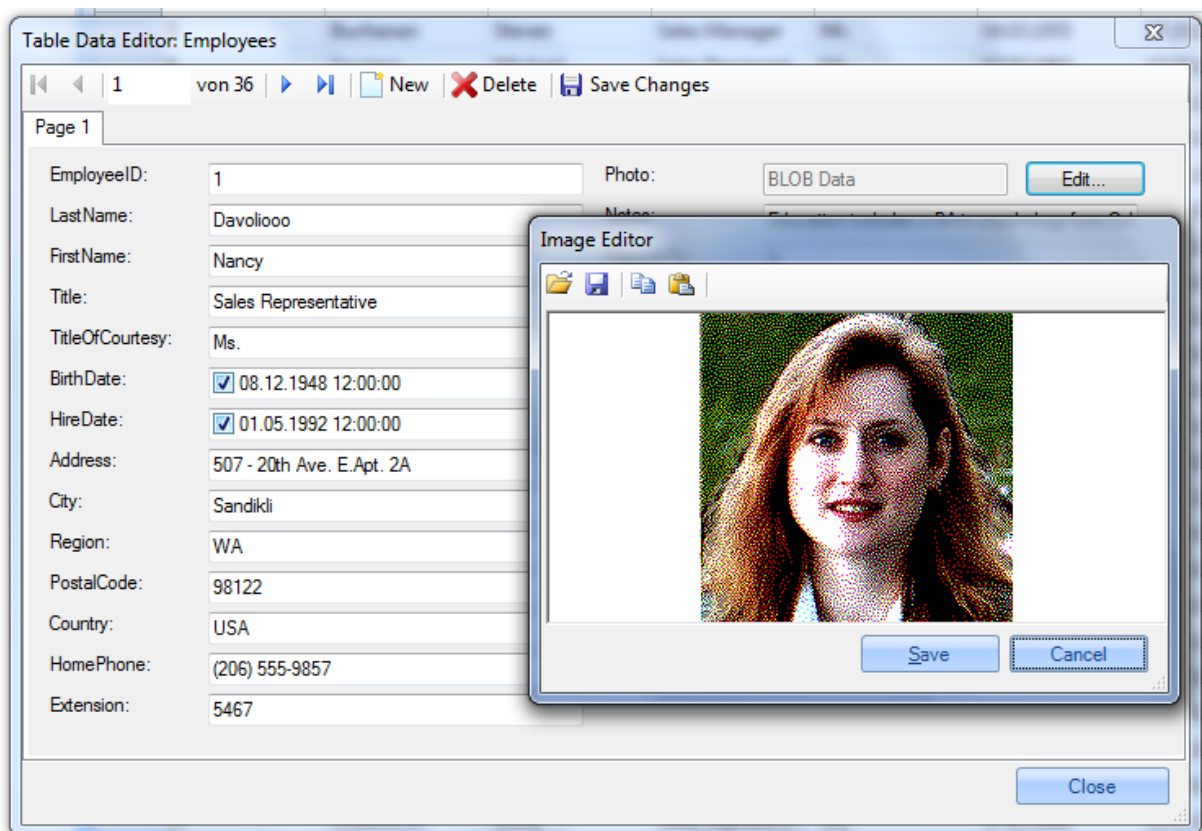


Table Data Editor

The data editor allows you the edit BLOB (Binary Large Objects) data using Image and Text Editor.

Image Editor:

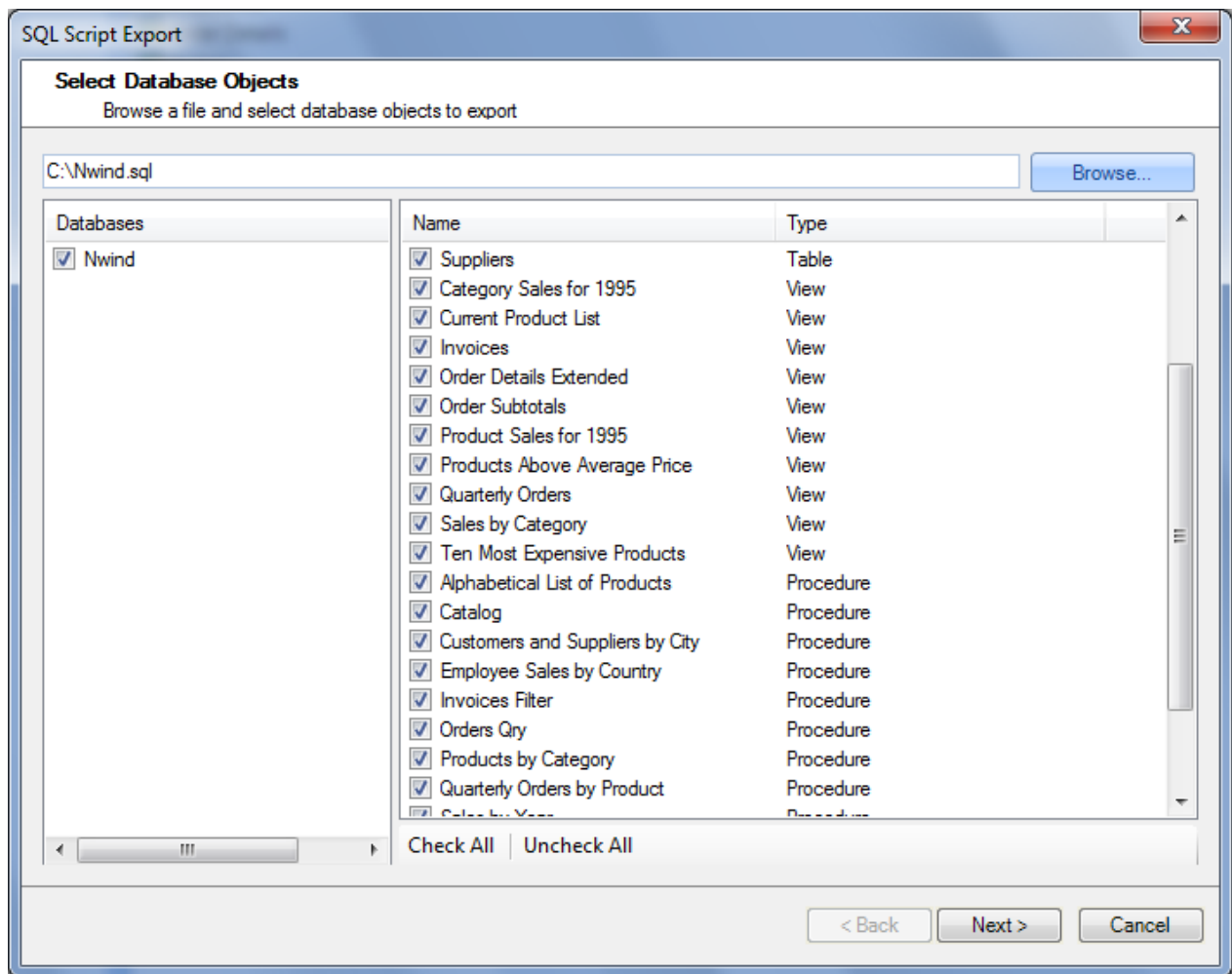
Using Image Editor you can copy the current image into clipboard or hard disk and load a new image and save it.

Text Editor:

The Text Editor allows you to edit text BLOB data, where you can save it to the hard disk or change and update text data in the database.

14 SQL Export

Database Master allows you to export your database structure as an SQL script. The user can export database structures like table, view, and procedure and table data. The user can also dump all database data into an SQL file.



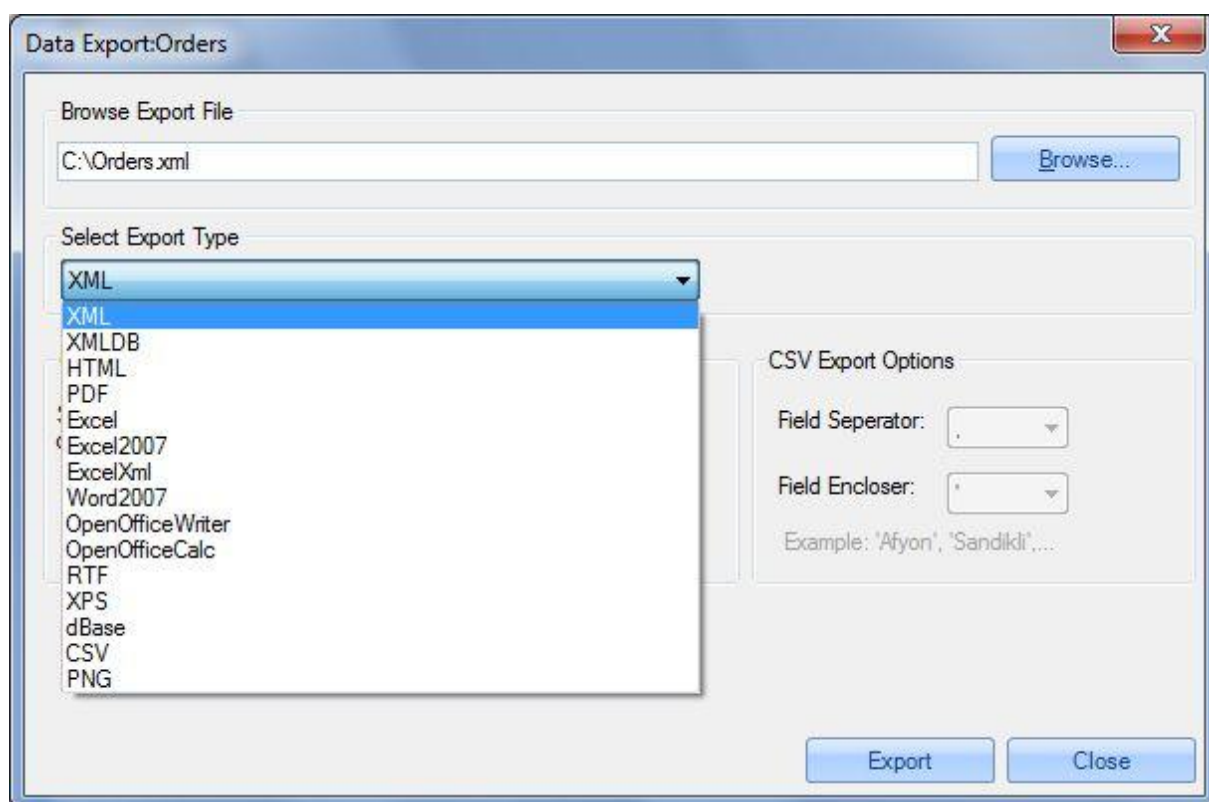
SQL Export Dialog

To export the data as an SQL script, you must select a database and one or more tables.

15 Data Export

The data export feature gives you an option to export and share your data. The export dialog provides the following data export formats:

- XML, XMLDB (XML file with XSD Schema), HTML, CSV, JSON
- Excel (XML), Excel 2007, Word 2007, RTF
- PDF, RTF, Open Office Writer, Open Office-Calc, XPS, dBase, PNG (Image)



Data Export Dialog

15.1 General Options

Encoding: Encoding of the file.

Write Column Headers: If the checkbox is checked, the Field (Column) headers will be included in the export.

Substitution for NULL (or Empty) Values: If data row or cell contains null (or empty) values they will be replaced by the chosen value type from the combo box.

15.2 CSV Data Export

CSV Data Export provides the following options:

- **Field Separator:** The separator character between the fields (columns)

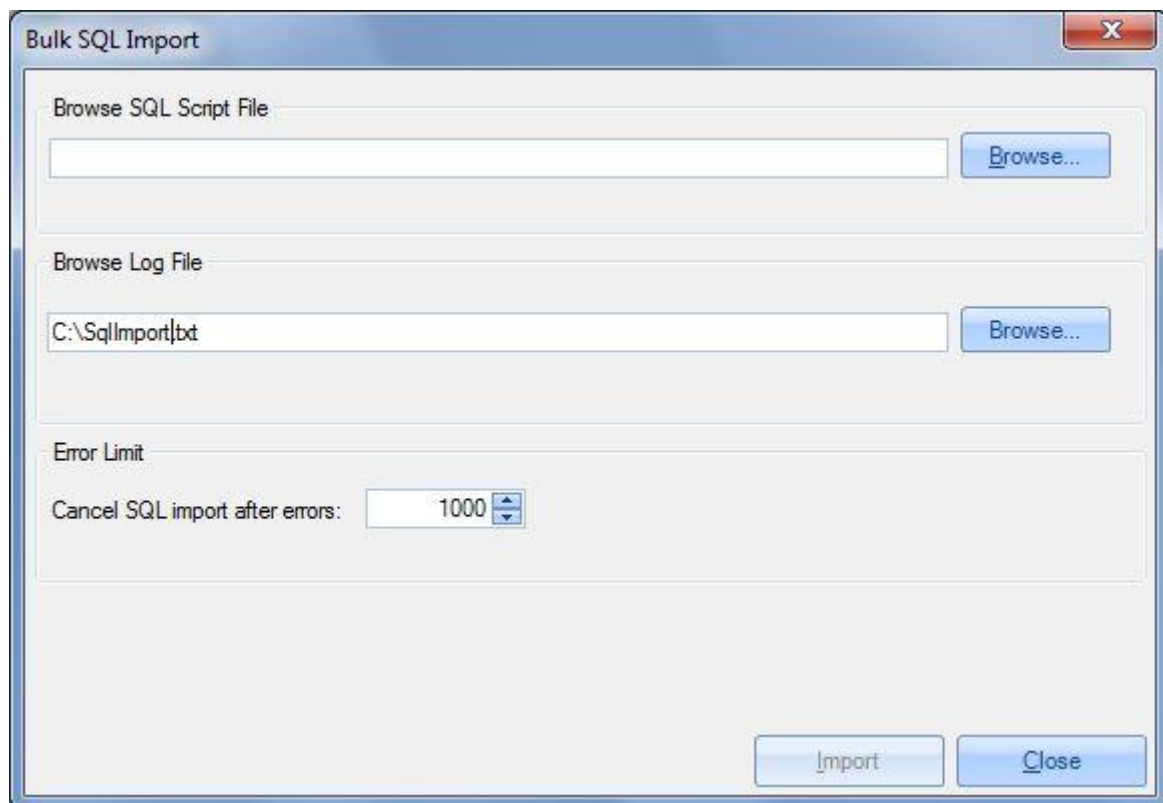
- **Field Encloser:** The field (column) data encloser.

16 Data Import

Database Master provides XML, CSV and bulk SQL import features.

16.1 Bulk SQL Import

The **Bulk SQL Import** can import or execute SQL commands (or statements) in an SQL file. Bulk SQL Import feature is a good fit for large SQL files and imports. You can import any large SQL file into your database and a progress dialog will be shown. During SQL import all log status and information will be written in a log file. After the import the user can check and find more information about bulk import.

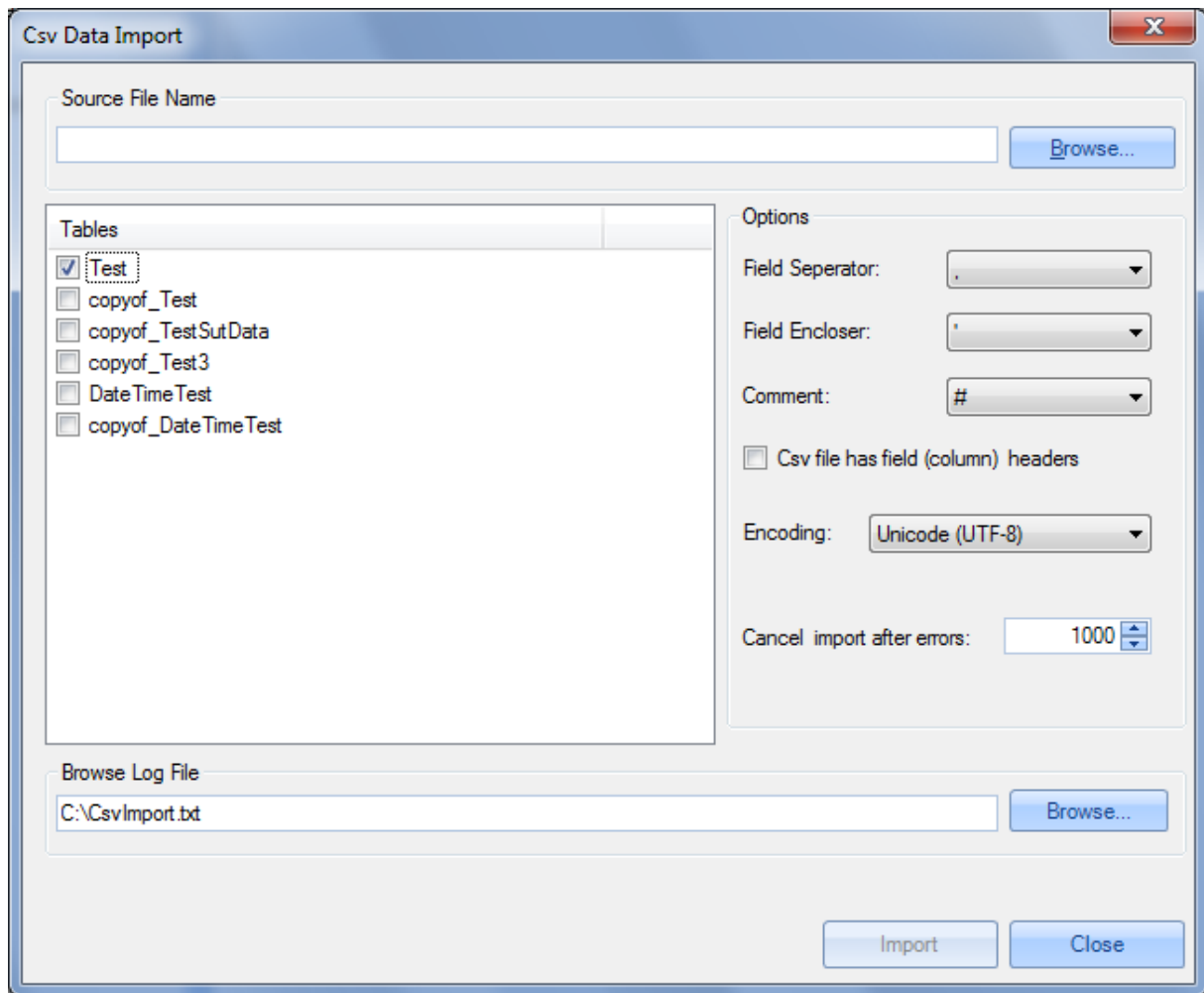


Bulk SQL Import Dialog

The log file will be written to the desktop but the user can change the file location.

16.2 CSV Data Import

Data import feature supports only CSV format. With this feature you can import any CSV data into a database table.



CSV Data Import Dialog

16.2.1 CSV Import Options

Field Encloser: Encloser character for the field.

Field Separator: Separator character for the field.

Comment: start character for the comment line

Encoding: Encoding of the CSV file.

Number of Error Limit: This option allows you to control your CSV data import.

Log File: The CSV import feature writes all import errors and import summary into the log file.

You can check this file after the import.

17 Data Search Engine

17.1 Advanced Search

The search engine feature is implemented to search data in the database. It allows the user to search data without using any SQL query which makes searching more comfortable. The search results are presented in a data view and can be exported to supported file formats.

When you create a query to search, you can define one or more clauses that will look for what you want to find. For each clause, you can specify a field, an operator, and a value or variable. For example, you can search for all column data in a particular table by specifying the table column.

A sample search clause:

And/Or	Field	Operator	Value
	City	Equals	Afyon
And	Code	=	03500
OR	MyDate	DateTimeEqual	01.01.2010

17.1.1 And / Or Operators

You can use this column to specify how clauses are tested. You can specify "AND" if you want to find work items that meet the criteria in both this clause and the previous one. You can specify "OR" if you want to find work items that meet the criteria in either this clause or the previous one.

17.1.2 Query Fields and Values

When you specify a value for a field, the value must conform to the data type of that field.

Data Search Operators

You can use search operators in following operator table to specify how each value in a clause must relate to the corresponding value in the table column.

17.1.3 Text (String) Operators

The search engine provides the following text (string) operators:

Operator	Description
Equals	Compares whether the specified text matches the string in the database.
NotEquals	Compares whether the specified text does not match the string in the database.
EqualsIgnoreCase	Case In-Sensitive: Compares whether the specified text matches the row

	data and ignores case.
EqualsMatchCase	Case Sensitive: Compares whether the specified text matches the row data match the case.
EndsWith	Determines whether the end of this string instance matches the specified string.
StartsWith	Compares whether the beginning of string instance matches the specified string.
Contains	Returns a value indicating whether the specified text object occurs within this string.
IndexOfAny	Searches the index of the first occurrence in this instance of any Character in a specified array of Unicode characters. This method performs an ordinal (culture-insensitive) search, where a character is Considered equivalent to another character only if their Unicode scalar values are the same.
Fuzzy Search	Search with fuzzy (approximate) matching. The matching score is 50%.
Regular Expression	Searches with regular expression.

17.1.4 Mathematical Operators

The search engine provides the following number operators:

Operator	Description
=	Equals (Matches the value in the database)
<	Smaller (Is less than the value in the database)
>	Bigger (Is bigger than the value in the database)
>=	Equals or Bigger (Is bigger than or equal to the value in the database)
<=	Equals or Smaller (Is less than or equal to the value in the database)
<>	Not Equals (Does not match the value in the database)

17.1.5 Date and Time Operators

The search engine provides the following date and time search operators:

Operator	Description
DateTimeEqual	Compares whether the specified date time matches the date time.
DateTimeEarlier	Compares whether the specified date time earlier than the date time in the database.
DateTimeLater	Compares whether the specified date time later than the date time in the database
DateTimeNotEqual	Compares whether the specified date time is not equal to the date time in the database.

17.2 Full-Text Search

Full-Text search allows you to search your text (words, sentences, numbers etc.) in your database tables.

17.2.1 Fuzzy Searching

Fuzzy searching will find a word even if it is misspelled. For example, a fuzzy search for **apple** will find **apple**. Fuzzy searching can be useful when you are searching text that may contain typographical errors (such as emails), or for text that has been scanned using optical character recognition (OCR). There are two ways to add fuzziness to your searches:

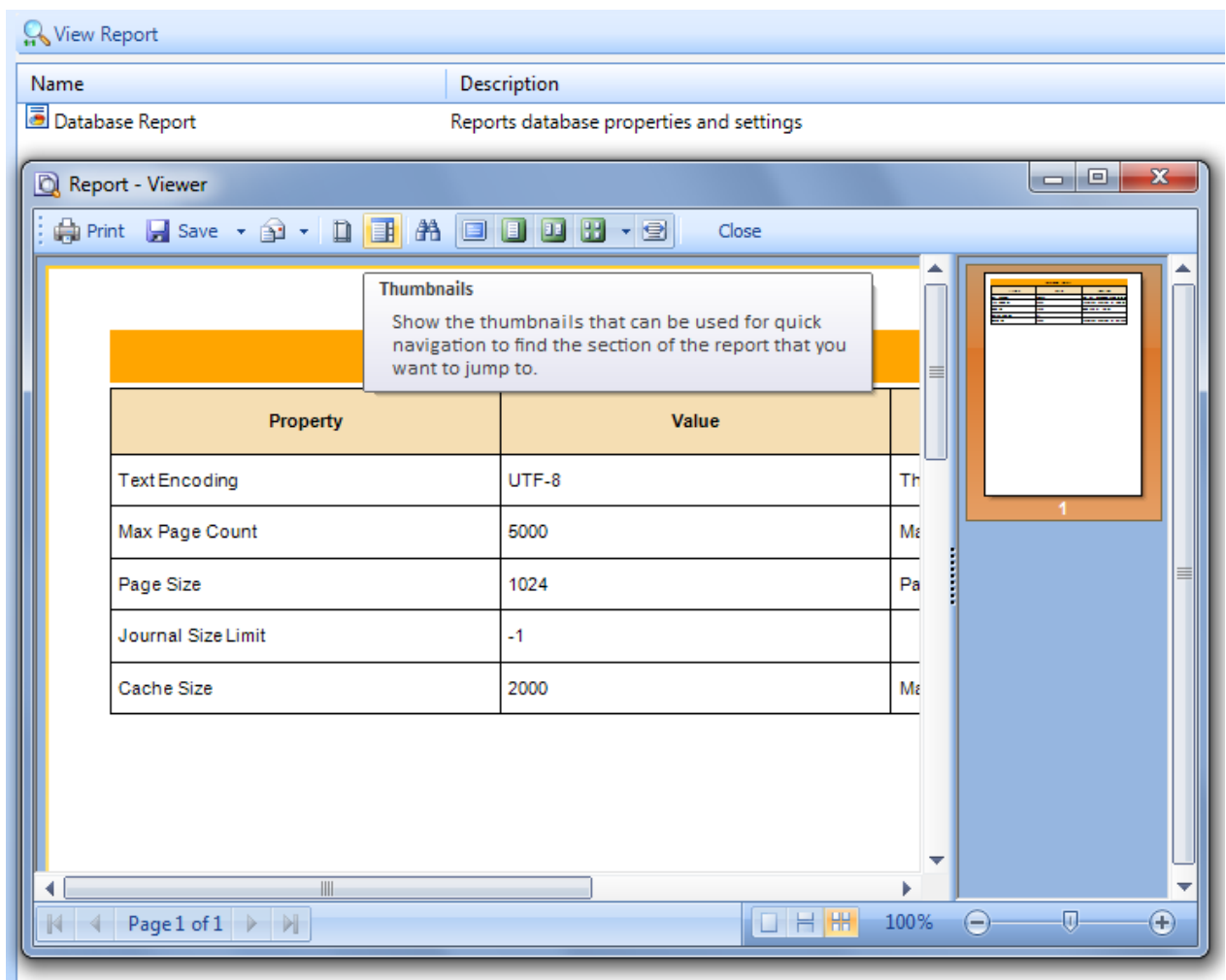
1. Check Fuzzy searching in the search dialog box to enable fuzzy searching for all of the words in your search request. You can adjust the level of fuzziness from 1 to 10. (Usually values from 2 to 5 are best for moderate levels of error tolerance.)
2. Add fuzziness selectively using the % character. The number of % characters you add determines the number of differences search engine will ignore when searching for a word. The position of the % characters determines how many letters at the start of the word have to match exactly. Examples:
ba%nana: Word must begin with **ba** and have at most one difference between it and banana.
b%%anana: Word must begin with b and have at most two differences between it and banana.

18 Reporting Data

Database Masters provides data reporting features so the user can report the data using **Report Viewer** dialog and export it to the supported file formats.

Static Reports

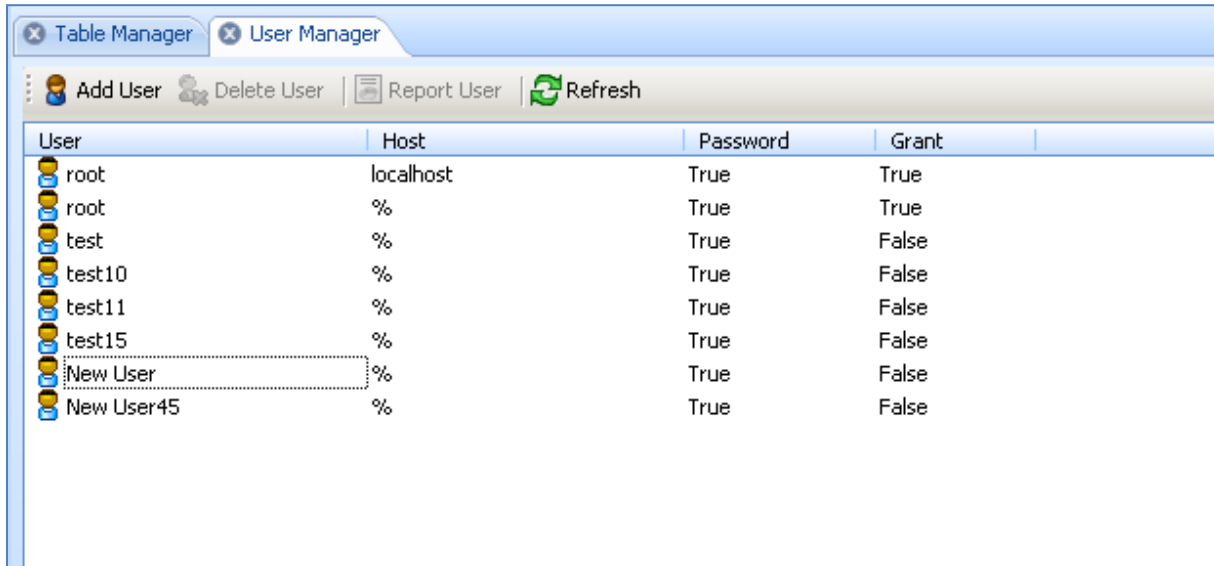
The static reports are available in the Reports tab. The other dynamic reports are based on the database objects so the user can view them just by right-clicking on the database object.



Report Viewer

19 User Management

Database Master provides user management facilities for the **MySQL, MongoDB** and **PostgreSQL** database systems. With this feature you can create new users, edit or delete the existing users of the database.



The screenshot shows the 'User Manager' tab in a software interface. It includes buttons for 'Add User', 'Delete User', 'Report User', and 'Refresh'. Below these is a table with columns for 'User', 'Host', 'Password', and 'Grant'. The table lists several users, including 'root' and 'test', along with newly created users 'New User' and 'New User45'. The 'New User' row is highlighted with a dashed border.

User	Host	Password	Grant
root	localhost	True	True
root	%	True	True
test	%	True	False
test10	%	True	False
test11	%	True	False
test15	%	True	False
New User	%	True	False
New User45	%	True	False

User Manager Editor

20 Entity Relations and ER Modeling

Entity-Relationship Modeling (ERM) is a database modeling method used to produce a kind of conceptual schema or semantic data model of a system and its requirements in a top-down fashion, often for a relational database..

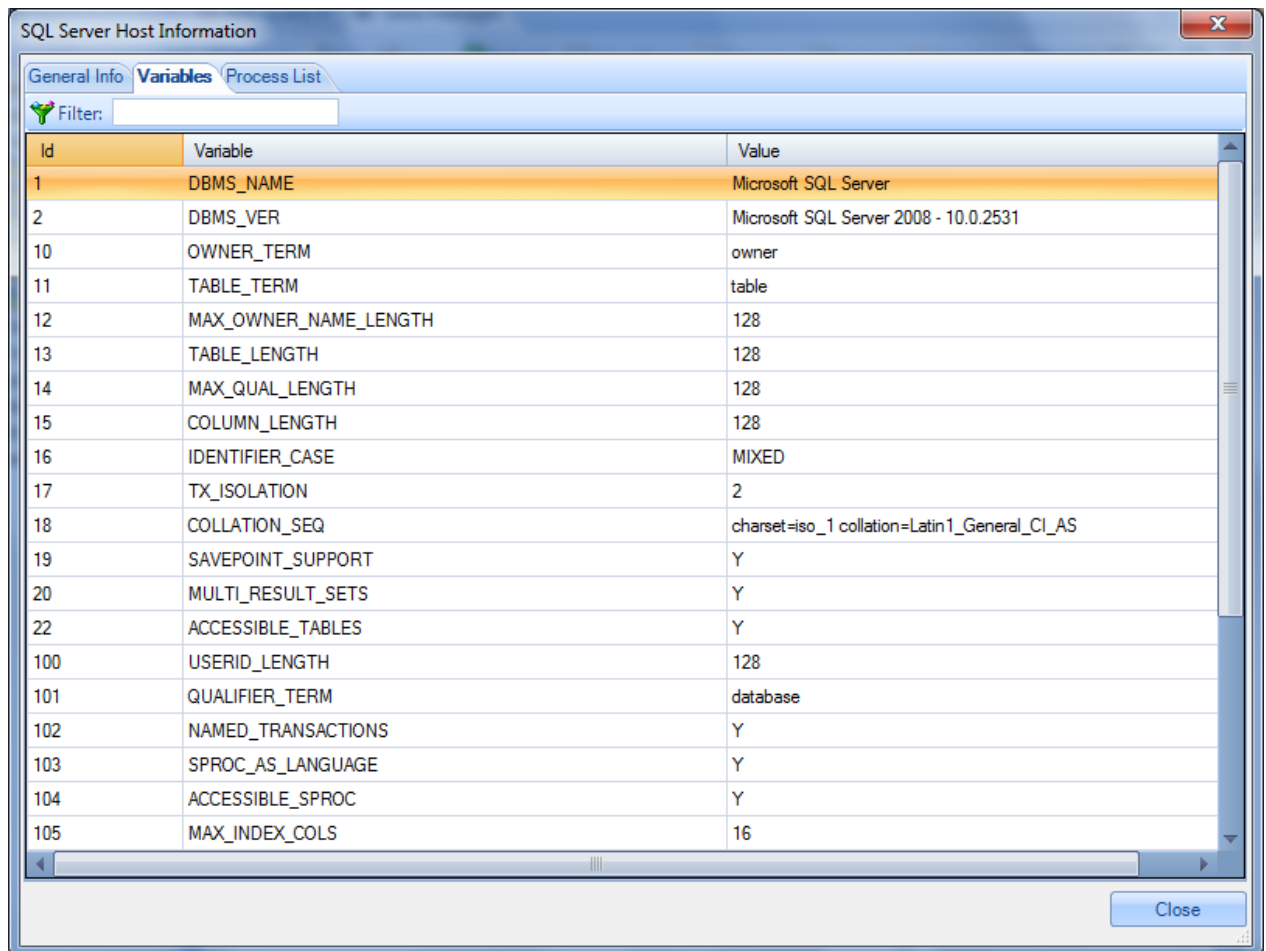
One of the important features of **Database Master** is the ability to generate the ER Model of the database physical schema through reverse engineering. The database's **physical schema** information will be read and its corresponding ER Model will be generated. Database Master uses the "Crow's Foot" notation for ER models.

For more information about ER Modeling, please see:

http://en.wikipedia.org/wiki/Entity-relationship_model

21 Host Information

Database Master provides information about the current connected host (server) to the user.



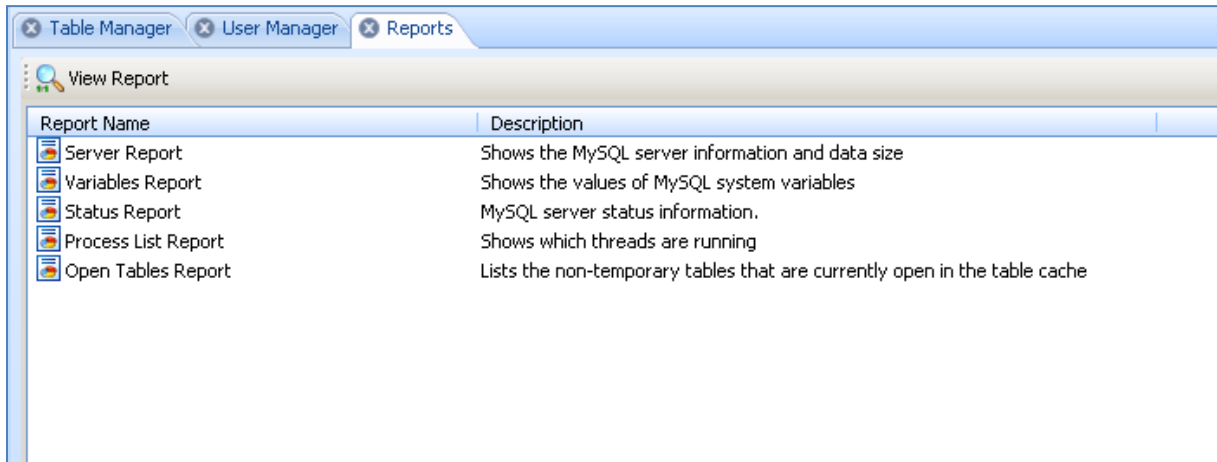
Id	Variable	Value
1	DBMS_NAME	Microsoft SQL Server
2	DBMS_VER	Microsoft SQL Server 2008 - 10.0.2531
10	OWNER_TERM	owner
11	TABLE_TERM	table
12	MAX_OWNER_NAME_LENGTH	128
13	TABLE_LENGTH	128
14	MAX_QUAL_LENGTH	128
15	COLUMN_LENGTH	128
16	IDENTIFIER_CASE	MIXED
17	TX_ISOLATION	2
18	COLLATION_SEQ	charset=iso_1 collation=Latin1_General_CI_AS
19	SAVEPOINT_SUPPORT	Y
20	MULTI_RESULT_SETS	Y
22	ACCESSIBLE_TABLES	Y
100	USERID_LENGTH	128
101	QUALIFIER_TERM	database
102	NAMED_TRANSACTIONS	Y
103	SPROC_AS_LANGUAGE	Y
104	ACCESSIBLE_SPROC	Y
105	MAX_INDEX_COLS	16

Example: SQL-Server Host Information

22 System Reports

Database Master provides powerful report features. These reports are pre-defined for you and you can view them by a double click or using view button.

Using **“Reports”** button, you can view the pre-defined system or database reports.



Reports Editor

Database Objects Reports

Database Master also provides reports for some database objects. Users can view them by a right -click on the database object (table, view or procedure).

23 Code Factory

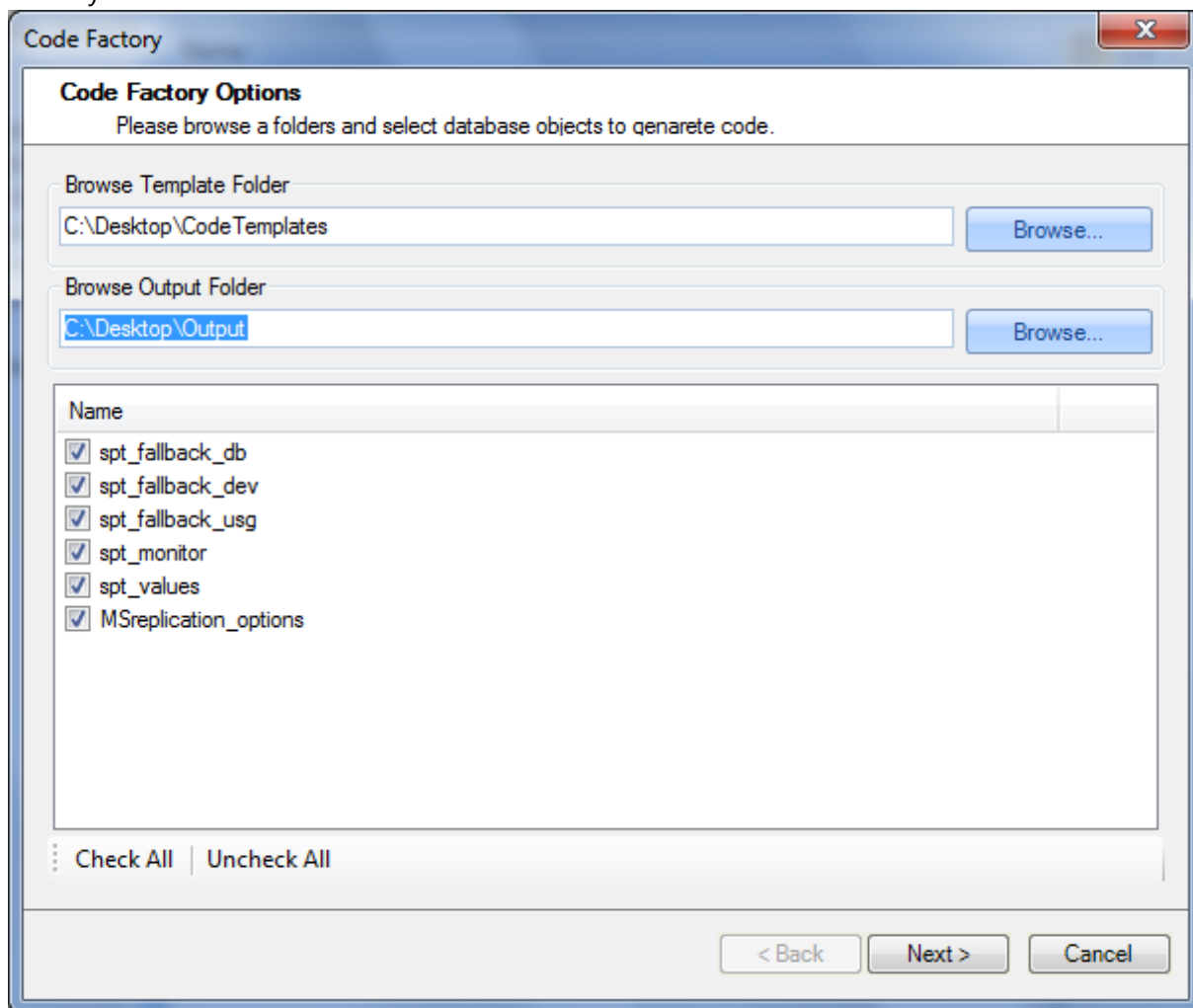
The Code Factory feature allows user to generate code for a selected language (Java, CSharp, PHP etc.) from the database structures and tables types. Code Factory works with code templates (*.codetemp) and the user can define everything in that template. This means you are free to define anything in the template; and to do that you need to add according to the following template syntax.

The following table describes the Code Factory template syntax:

Syntax	Description
<filename> </ filename >	The name of the output file.
<foreachfield> </foreachfield>	For every table, field (column) will be printed.
\$TableName	The name of the table will be printed.
\$FieldType	The type of the field (target language) will be printed.
\$FieldName	Name of the field will be printed.

The user should create her/his code templates. The Code Factory reads top directory and all sub directories and generates the code for each template. It copies other project resources (images, xml files) into the target folder. So you can generate the whole project with Code

Factory.



Code Factory Dialog

24 Maintenance

Database Master provides database and tables' maintenance features for MySQL, PostgreSQL and SQLite database systems.

There are two SQLite maintenance features:

- Check Data Integrity
- Vacuum The Database

There are four MySQL maintenance features:

- Check tables
- Analyze tables.
- Repair tables. It allows you to repair the database, if the checking or analyzing tools report errors.
- Optimize tables. Optimization allows you to increase the MySQL performance. This should be done on a regular base.

25 Data Package Export/Import

Database Master provides a powerful export and import feature to export and import your data without any encoding, corruption and size problem. It also provides the advantage of blob data type export and import. You can backup your database data, transfer your data via internet or network or send it to your friends via e-Mail without any data corruption or data error.

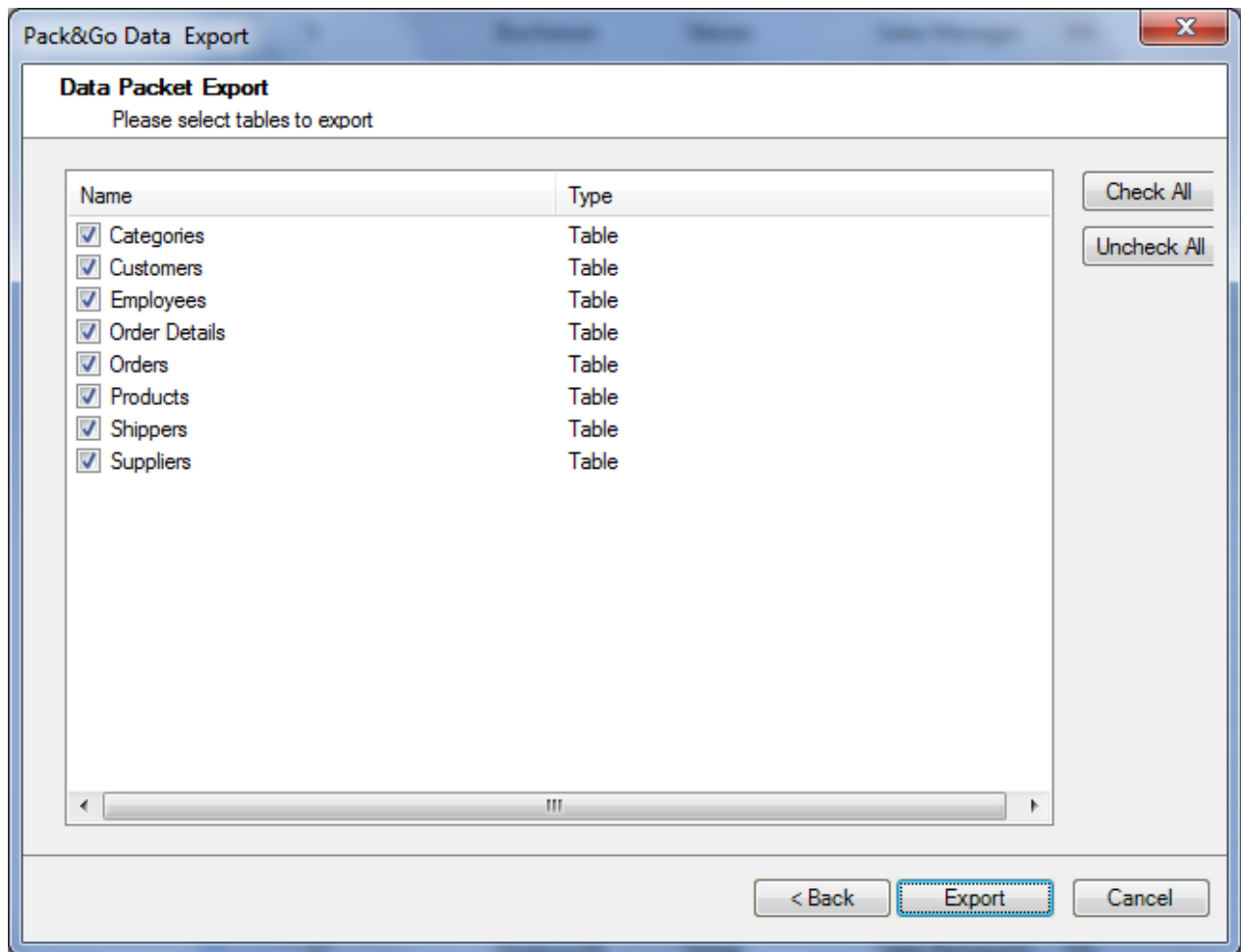
Data Package feature has **.datapac** or **.dpack** file extensions and can be opened by any zip utility. **Data Package** feature allows you to export large databases that contains images or any blob data correctly. It also allows you to protected the data package with a password. **Data Package** file format uses the ZIP file format to package data and it is also readable by and useful for third party applications.

Why should I use Data Package Export/Import?

Exporting data as an SQL script is not suitable for large data or blob types. The data can corrupt or importing large SQL files can fail. **Data Package** feature allows you to export and import your data in a secure way and by doing so you can share your data with third party applications.

25.1 Exporting Data Package

To export a Data Package you should select a database and its tables to export. The following dialog shows how to export a data package:



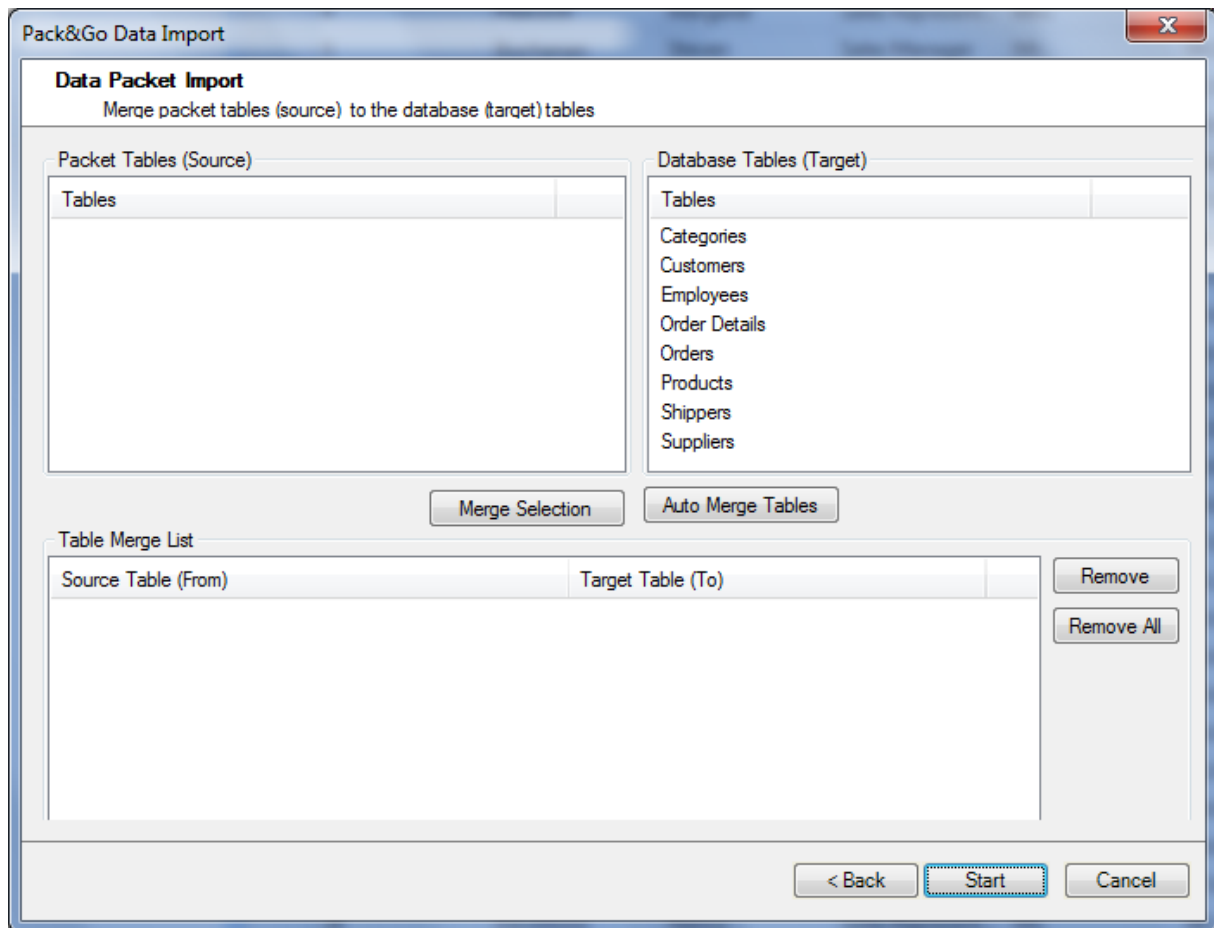
Data Package Data Package Export Dialog

25.2 Importing Data Package

The data packages can be imported from the same or different databases. To import a data package, you should first browse the package and assign the source-target tables. They will be automatically assigned when you browse the package. If the data package encrypted with a password, you need to enter the password first then browse the package file.

Why should I assign the source/target tables?

Data Package import feature allows you to import data from different tables. This means that the target and source table names must not be the same but their table structures must be the same, otherwise data will not be imported.



Data Package Data Package Import Dialog

Assigning Target and Source Tables

This list is used to import data between values in the source tables and the relevant tables in the target database. To assign a source table to a target table, select a value from the **source table** list on the left and the relevant target table from the list on the right and click the **Assign Selected Tables** button. To remove a relation, select an item from the right list and click the **Remove** button.

26 Options

The Options feature allows you to customize the Database Master. It provides the following options:

26.1 General Options

26.1.1 List View

The List View setting is for the manager windows (Table Manager, View Manager, etc.).

26.1.2 Data Paging Counter

The data counter is the number of rows in the table data view. When the user clicks the "View Data" button in the Table Manager, the table data will be viewed but the view wouldn't include all of the data in the database table. So the number of data rows viewed can be set here. The default value is 500.

27 Purchasing

Purchase your Database Master license online at:

<http://www.nucleonsoftware.com/>

Purchased licenses are delivered by email. [Be sure to include share-it.com in your approved senders list so that your license will bypass mail filters.]After receiving the license to complete your registration, click Help->Activate Database Master and enter your license.

28 Further Help

If you want more information or help for Database Master or want to submit some feedback, there are some alternatives:

Use the following information for further help:

Support: support@nucleonsoftware.com

Web: <http://www.nucleonsoftware.com>

28.1 Bug Reports

If you find that **Database Master** isn't working correctly or just crashing, you probably encountered a bug. First check if you have the latest version, because on every release of **Database Master** will many contain improvements and bugs fixes.

Please make sure that you are using the latest version of **Database Master** and that you have carefully read this help file.

For Bug (Error) reports please use the following e-mail: support@nucleonsoftware.com

28.2 Feature Requests

If you have a (very) good idea on how to improve Database Master, you can request a feature using the following e-mail:

support@nucleonsoftware.com